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Florence Nightingale.

SAINT FILOMENA

When e'er a noble deed is wrought,
When e'er is spoke a noble thought,
Our hearts, in glad surprise
To higher levels rise.

The tidal wave of deeper souls
Into our inmost being rolls,
And lifts us unawares
Out of all meaner cares.

Honor to those whose words or deeds
Thus help us in our daily needs,
And by their overflow
Raise us from what is low.

Thus thought I, as by night I read
Of the great army of the dead,
The trenches cold and damp,
The starved and frozen camp,—

The wounded from the battle-plain
In dreary hospitals of pain,
The cheerless corridors,
The cold and stony floors.

Lo! in that home of misery
A lady with a lamp I see
Pass through the glimmering gloom
And flit from room to room.

And slow, as in a dream of bliss,
The speechless sufferer turns to kiss
Her shadow, as it falls
Upon the darkening walls.

As if a door in heaven should be
Opened and then closed suddenly
The vision came and went
The light shone and was spent.

On England's annals, through the long
Hereafter of her speech and song,
That light its rays shall cast
From portals of the past.

A lady with a lamp shall stand
In the great history of the land
A noble type of good,
Heroic womanhood.

Nor even shall be wanting here
The palm, the lily and the spear,
The symbols that of yore
Saint Filomena bore.

—*Henry Wadsworth Longfellow.*

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CHARLOTTE A. AIKENS

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TRAINING SCHOOL METHODS

FOR

INSTITUTIONAL NURSES

BY

CHARLOTTE A. AIKENS

Formerly Director of Sibley Memorial Hospital, Washington, D. C.; formerly Superintendent of Iowa Methodist Hospital, Des Moines, and of Columbia Hospital, Pittsburg; author of "Primary Studies for Nurses," "Clinical Studies for Nurses," "Hospital Management," "The Home Nurse's Handbook of Practical Nursing," and "Studies In Ethics for Nurses"

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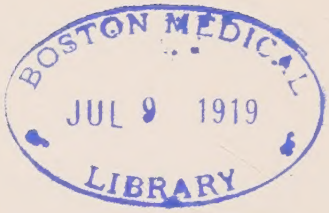

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Preface

The increasing importance which attaches to the position of head nurse and the influence which such nurses exert in the life and work of a training school, has emphasized the need of a book which might be practically helpful to the nurse who is assuming for the first time the responsibilities of a paid executive in a hospital either as head of a department or instructor of nurses.

In the preparation of this volume these two types of nurses have been constantly in mind. It is also hoped that the book may prove of practical value to the principal who desires to offer some special instruction to senior pupil nurses that will better fit them to effectively carry the responsibility of supervisors, and to measure up to just expectations in institutional work.

The book follows the same general plan that was followed in an earlier volume on the same subject but the chapters have been so fully rearranged and rewritten that the book is practically a new volume.

Portions of a few of the chapters have appeared in the Trained Nurse and Hospital Review. The author is under obligation to many friends who are active in training school work for practical suggestions which have been woven into the pages. Grateful acknowledgment is here made of the inspiration and valuable assistance received from the late Miss Lauder Sutherland, who as principal of the Hartford Hospital Training School was keenly interested in its preparation.

Miss E. K. Kraemer, superintendent of the Frederick Ferris Thompson Hospital of Canandaigua, New York,

and Miss Reba Cameron, of Taunton State Hospital, Taunton, Mass., Miss Harriet Leck, principal, and Miss Pollock, instructor, in the Training school of Grace Hospital, Detroit, Miss Maud Landis, of New Haven, and Miss Minnie Goodnow, of Boston, have all rendered practical assistance of great value.

To the Denoyer-Geppert Company of Chicago special thanks are due for furnishing cuts of physiology and food charts.

CHARLOTTE A. AIKENS.

DETROIT, *March*, 1919.

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TRAINING SCHOOL METHODS FOR INSTITUTIONAL NURSES

CHAPTER I

The Training School Task

The hospital training school in the twentieth century faces a problem more complex, more difficult in its general working than that of any other educational institution. Its main task—to produce nurses who are competent to care for the sick of all classes, appears on its surface comparatively simple in view of present-day resources.

Its difficulties arise largely from the widely differing angles from which the problem is viewed by different groups of people—all of whom are related in some way to the main problem—proper care of the sick—all of whom are working more or less intelligently and industriously at some part of the task. Many of these workers are unable or unwilling to see the problem as a whole and adapt their methods to the development of a comprehensive system of theory and practice that will fit everyday needs as revealed in a modern community.

The superintendent or principal of a school is face to face constantly with the burden of giving proper care to the sick, the increasingly exacting demands of modern physicians, the often insufficient income which refuses to stretch with the growth of the cost of the necessities of life, and the responsibility of doing justice to the group

of young women who come in as raw recruits and who must be transformed into skilled workers.

To accomplish this many-sided task creditably, she must be able to see her problem in its larger aspects in its relation to the community and state, and yet never lose sight of the small details which mean much to the comfort and well-being of all concerned—details which have much to do with making or marring the reputation of the institution, and which enter largely into the making of an efficient nurse.

In the half century and more of experience in training school work in which a constant effort has been made to establish principles which can be widely or universally applied, to classify the knowledge gleaned from many sources, and to improve methods of nursing practice, there have always been and probably always will be wide differences of opinion as to which way the path of wisdom and of real progress leads.

Principles and Prejudices.—The principal who succeeds in training school work must be able to distinguish clearly between principles and prejudices. She must have the courage of conviction to oppose and reject what her careful judgment fails to approve; to refuse to subordinate the welfare of the sick for the benefit of the nurses, or to exploit the nurses for the benefit of the sick or the institution. She must have a strong sense of justice tempered with mercy, and the ability to inspire confidence in those who naturally look to her for leadership.

Her difficulties are increased by a well-recognized tendency to attach undue importance to the turning out of a supposedly ideal training school product without proper consideration as to whether that product is capable of and willing to do the work for which the greatest need exists. The manner in which the actual work needing to be done is done is the final test of a product.

In the building of an automobile, expert testers are employed to experiment with the working of every new device or part. It is subjected to the most rigid tests under all sorts of conditions and on all sorts of roads. A part that worked perfectly on a well-paved level street may utterly fail when put to test in hill climbing or on a rough or sandy road. Gears and levers which seemed to give satisfactory service when the requirements were very ordinary and moderate, may utterly fail when put to the test of an unusual strain. The causes for failure of a device or part to do the thing expected of it are rigidly searched out and corrected before the part is put forth to become a portion of the finished product. In this way new "models" are produced. Some similar study might wisely be given every few years to the products of the training schools of a state. New models are needed from time to time. The causes for failure to meet the needs of the public should be studied. Adjustments must be made. Organization, so that proper distribution of a product will result, is quite as necessary as methods of production, in the development of a harmonious, comprehensive, practical working system.

Keeping the Balance.—No *single phase of the problem before* the modern training school needs more careful consideration than that of preserving a proper balance in the product of the schools, so that no part of the field will be overstocked with skilled workers who become discontented because of very intermittent demand for their services, and other portions left without any real trained service. Our civilization has progressed too far for us to be satisfied to see one class of patients receiving exquisite care, while others die of neglect or drag out a weary existence because of improper nursing.

Standards of training have been fixed in different states

through registration laws that have helped hospital schools to recognize more clearly their responsibilities and limitations, but registration standards differ widely, and the fact remains that large groups of the sick are not included in present-day training school plans as a whole. Theoretically they are included. So far as actual contact and experience of the pupils of the school with various groups of the sick is concerned it does not exist.

The experience of half a century clearly teaches that it is folly to expect the *average* nurses who receive their training in large centers of population to leave the place and people made familiar to them during training, and choose the smaller towns and rural districts as their fields of service. No amount of instruction on the subject of duty is going to change this tendency of human nature among nurses which leads them to crowd into larger places, even though the demand for their service is less than it would be in smaller places.

If the smaller towns and cities are ever to be supplied with skilled nurses it will have to come by developing the nursing material in and close to those towns and cities, and in training nurses under the general conditions in which they will have to work—not by training them in large cities and then pleading with them to go to smaller or to more isolated places. Given a proper attitude toward human needs as they exist in smaller places, a broad general standard of training, and proper organization of all the resources required to provide an adequate nursing service for a community, no principle or standard that is necessary to good nursing needs to be sacrificed.

From the extreme individualistic method of training in which every school was a law unto itself, and gave as much or as little instruction as it chose, the pendulum

has swung to the other extreme in which an effort is made to make all the training schools of a state conform to one special model. Between these two extremes the way of wisdom and justice will be found. The pendulum must swing back, and extremes in both of these directions avoided. There are in every state and province ample possibilities for rounding out and supplementing the training which can be given in a small hospital school in a smaller city or town. We shall never make satisfactory progress in the care of the sick until real study is given to the different types of nurses needed in every state, how many approximately of each type are needed, and coördinate the institutions and resources of every state so that the public in each community will be supplied with the kinds of nurses it needs. Such a survey of community and state needs and resources is based on sound business principles and is not impossible in any state. A wider vision, a broad tolerance, a close study of the kinds of nurses needed, a work-together spirit, and a comprehensive plan of organization in every state, will go far toward improving conditions in every state and province which now are the source of real concern to those who are sincerely interested in improving general health conditions, as needs are revealed in all sorts of communities.

How to elevate the standards of nursing has been a much-discussed subject but too often its discussion has been limited to educational standards pure and simple, and not to real nursing. The discussion has centered around the education which should be demanded by those entering the schools, and to various features of education while in the schools, and has largely left out of consideration standards of service, the standard in the care of the sick which civilized society has a right to demand, and which after all is the real criterion of excellence which the

world in general will insist in applying to the work of training schools.

Each state is an epitome of society as a whole. In it are represented the insane with their special problems of care, the tuberculous, the chronic, the deformed and handicapped, the aged, the women of child-bearing age, the children—the nation's greatest assets, whose health needs to be safeguarded, those suffering from minor or more serious acute ailments, accidents and disasters, those who develop diseases that are preventable.

Real progress in nursing will be measured not by the number of hours spent in class work, nor by the ease with which pupils answer the questions in their final examinations but by the manner in which *all these varying classes of sick are cared for* in city and country, in county, state and province.

The training school owes to the pupils which it admits to its classes, a proper class-room equipment, efficient instructors, a thorough comprehensive course of instruction, and time for study and recreation. If the hospital of which the school is a part does not afford sufficient practical experience to give nurses a well-rounded training, it should seek affiliation with some other hospital that can supplement where the lack of opportunity for practical experience exists. A study of the resources of almost any state or province will reveal opportunities for affording experience which nurses sadly need, but which go unutilized largely because of some peculiar prejudice that exists in regard to certain kinds of institutions and to various classes of the sick.

The building of ideals and the shaping of right judgments is clearly a part of the training schools responsibility. It owes to each nurse above and beyond the requirements of the curriculum, a study of her personality, it owes to her the kind of discipline that tends to

develop her best powers, that forces her to cultivate self-reliance and self-control, that helps to give her the right mental attitude toward human needs.

Its task includes the giving to the nurses whom it sends forth as its representatives, a standard of personal service, a vision of the opportunities that the world holds for those who are willing to sacrifice in order to fit themselves for wider service; for instilling in them right principles; for helping to give the proper bent to their life purpose and plans; for developing in them worthy ideals as to what constitutes success in a nurse's life. This ethical responsibility is just as clearly a part of the work of the twentieth century training school as is instruction in the giving of baths or the making of solutions.

Real progress will be determined by the measuring stick of practical utility and the adaptability of the training school product, by its responsiveness to human needs wherever those needs exist. Until a training school has seriously undertaken the task of developing in its nurses that social consciousness that will help them to get in the place to which they belong, with reference to the privileges and obligations which surround them, it has not fulfilled its whole duty to the pupil nurse.

CHAPTER II

The Pupils

Of all the varied responsibilities of the superintendent or principal of a school few present more difficulties than that of the wise selection of probationers. The custom of providing for a trial period in which the candidate may be tested as to suitability simplifies the problem to some extent but in any case the matter is one that requires careful consideration of every candidate admitted and of a variety of other problems which are frequently involved.

The character of the pupils admitted for training will determine to a large extent the quality of the work done and the real spirit of the institution. *Conduct is a large part of life, and conduct is dependent on character.*

In the beginning of training schools Florence Nightingale placed first in her requirements for nurses, the character test—the matter of a high moral standard for those who sought training. There was no doubt that to her a good nurse must first of all be a good woman. In her talks to probationers in the Nightingale school, emphasis was always laid on the following points: that nursing more than most occupations demands a religious basis; that it is an art in which constant progress is the law of life; that it should be undertaken as a vocation and without any feeling that a sacrifice is being made; and that the moral influence exerted by every nurse, consciously or unconsciously, is one of the most important tests of her fitness for the work.

However far we may have advanced beyond her conception of training, we have not yet reached a point

where we can afford to discard or overlook or place as secondary in importance the combination of qualities which she insisted on in those earlier days.

The motives which prompt a candidate to seek training are always important to know. Whether the would-be pupil has a fair general understanding of the nature of the work she seeks training for, whether she is prepared to meet in the right spirit the experiences and discipline involved—these are points not to be overlooked.

The matter of intelligence and general education looms large in considering fitness. It is well for every superintendent to have a clear definition in her own mind as to what real education consists of, and to remember that real education cannot be computed by the number of months or years spent in school.

The standard of one or more years in high school is desirable to keep in view, but it does not mean a broad general knowledge nor an intelligent appreciation of duty and responsibility, not always even a wholesome ambition, nor that habits of study have been acquired. It should not obscure or outweigh other things that should enter in. It should not be made a fetish of. Whether the best use has been made by the candidate of the opportunities that life has afforded, whether the general development of the intellectual faculties has been normally progressive, is in some cases exceedingly important to consider, if justice is to be done. There is an education that comes to a young woman who has had to carry responsibility, that is never acquired without it, and this kind of educational experience is often more than an equivalent for years spent in school without definite responsibilities of any kind.

An entrance examination can be arranged for such applicants as show promise of real fitness for nursing but who are unable to present high school certificates,

and will save to the school many very desirable candidates who might otherwise be lost to the school and to nursing, if hard and fast requirements as to hours in classes or years in school, are made.

Standards are necessary and desirable, but should be more or less elastic. The world is looking for healthy, conscientious, reasonably intelligent nurses, with common sense, and wholesome ambitions, and the training school should be wise enough to recognize these qualities in a candidate even if no high school certificate accompanies them.

High educational qualifications can never, in the work of a nurse, compensate for moral deficiencies. It is poor business to try to veneer poor character with professional skill. Back of the way everything is done is the doer. Good nurses can only be made by building professionally upon good native qualities of the soul, and good general intelligence and ability.

In considering this matter of standards it is well to remember that in all the circumstances of life it is necessary for us to sometimes stop short of the ideal, and accept the best that can be done under the circumstances. When educational standards are too high the quality of the actual nursing often suffers, because enough pupils with the desirable native qualities plus the superior education desired, cannot be secured. The training in the refinements of nursing practice, is very apt to deteriorate when the staff is insufficient and both patients and nurses are losers.

Twenty or even ten years hence we may not need to bother even looking at a candidate who has not a high school diploma in her hand when she applies, but, *in the country as a whole*, present conditions and common sense are against hard and fast educational standards.

How to increase the supply of desirable well-educated

candidates is a subject to which much study needs to be given. To advertise or not to advertise the school is a question which many training schools have to decide every year.

Educational institutions of all sorts from kindergartens to universities, from schools for backward children to military academies, from religious seminaries to "finishing schools" for society girls, all carry paid advertisements, citing the advantages offered by their particular institutions. Medical colleges and post-graduate schools spend considerable sums of money in carefully planned advertising and the progressive superintendent who wishes to increase the number of pupils in her school may wisely give very careful consideration to how and where to advertise her school.

General magazines having a national or country-wide circulation are not the best places as a rule to advertise schools of nursing. Because of the high cost and for other reasons the results of such advertising are usually disappointing.

Who is the average young woman whom you wish to reach and where is she most likely to be found? Usually she is living in a good home. She may or may not have some definite occupation outside of her home. A study of the newspapers and magazines that go into really good homes is worth making.

How to interest the high school and college students in the vicinity of the hospital and school is a subject for special consideration. Ask for an opportunity to talk to the high school girls of the community. Have your talk carefully planned so as to create the desire to become nurses. Include in your talk the personal qualifications required, the development that comes through training, and the almost unlimited opportunities there are for high grade women to find in nursing a wonderful field

of satisfying service. Remember also that the average high school girl expects to marry, her parents want her to marry, and let her see that all through married life, she will find use for her training, even if she does not follow any of the numerous lines of nursing activity.

In smaller communities the very most should be made of the graduating exercises to interest the young women of the community. Be generous with invitations. See that every school teacher (especially every high school teacher) in the locality receives an invitation. If possible secure the names of high school girls about to graduate and mail to each an invitation.

Dispense with some of the customary dry-as-dust or light-as-chaff speeches which cost nothing and are worth nothing to the school, and study how to make the graduating exercises one of "the events of the season." Have a high class musical program. Secure an orchestra if possible. Pay for one or too good readings by a good elocutionist. Interest the ministers of the county in the school, and ask their coöperation. Secure a mailing list of doctors in small towns in the state and keep them informed of the needs and advantages of your school.

Be sure first of all that you have a really good school to advertise and that your reputation for fair treatment of nurses is what it ought to be.

When is a Probationer Unfit?—The great responsibility which the hospital superintendent or principal has for rejecting the probationer who is "*unfit*," is a matter which is frequently emphasized. Less frequently do we hear of definite expressions being made as to what renders a probationer unfit—or in what way may she be unfit. Whenever after graduation a nurse does some unethical or unbecoming thing, some one is ready to say: "*She should never have been allowed to graduate.*" Few graduates have any realization of how difficult the

"weeding out" process really is—in many schools. Few could fully answer the question as to what constitutes unfitness. Quite often, with the right sort of training, it is possible to really change a candidate who *seemed* "unfit" into a very capable nurse.

The nurse who is so slow as to be exasperating on a busy day in a large ward, may develop into the finest kind of a private nurse. I have in mind one nurse who habitually forgot orders, or failed to carry them through, if she had more than two or three patients. Yet with one patient she was an unqualified success. Every patient she had, loved her. She was untiring and unselfish to the last degree, yet utterly unable to "organize" her work where several patients were concerned. Was she or was she not to be considered "unfit" when again and again she failed to measure up to responsibility and failed to carry out orders, or "forgot" to do things which she was told to do? In every-day life it is easier to forgive lapses, when we know for a certainty that the overlooking of duties or orders or requests was not due to a desire to shirk, nor was it a deliberate violation of orders.

The probationer who in her early days shows a tendency to shirk any distasteful tasks, is one who seems unquestionably "unfit." I recall a nurse who when asked what led her to offer herself for training, replied with quite an air of pride that she was a student volunteer for the mission field, and desired to fit herself for the highest usefulness. It sounded encouraging, but she didn't know how to comb her hair or get her clothing on so that there were no gaps between skirt and waist or where buttons should have been; and she "*just hated 'emptying things' and cleaning up* after dirty dressings." She was clearly unfit, though a college graduate who "wished to fit herself for the highest usefulness."

Theoretically she was "fit;" practically she was most decidedly unfit.

A nurse who seems unwilling to submit to discipline or to take orders from those who have been appointed her superiors in office; the nurse who habitually grumbles or criticises the management may, probably, be declared at once unfit, however clever she may be.

The unfitness of poor health is more easily dealt with, though it is often a grievous disappointment to the candidate who is otherwise desirable. A medical examination where poor health or some grave physical defect has made itself apparent, will serve to prepare the candidate for the disappointment of not being allowed to continue in the work. To be able to suggest some less arduous or exacting work, making less demand on physical strength, will often help to give the bit of courage to go on that is so sadly needed at the moment.

Less difficult is it to deal with the nurse who gives up and wants to go to bed for every slight ailment, or who will report "not well enough to go on duty" in the morning and be unable to locate any definite ailment. This occurrence two or three times during the probation month is an indication of what may be expected. Sometimes a serious talk with such a girl will help her to brace up, but it should be clearly shown to her that she counts *one* on the working force, that when she fails the duties which belong to her must be carried by some one else, in addition to their own, and that to try to carry through training such an "uncertain quantity" as she has shown herself to be, is an injustice to the other nurses.

The candidate who is unteachable—unwilling to be corrected, is often so capable along practical lines, that she furnishes the worst kind of example to probationers and juniors along ethical lines. Perhaps the most

difficult problem comes when a girl has proven herself during her probation as promising and "worth while," has been accepted and then unexpectedly develops qualities which make it desirable in many ways to get rid of her. She grumbles at the least extra duty, or she regards rules as made to be broken, or she develops a too familiar attitude when dealing with men, or her records are untrustworthy, or she cannot get along sweetly in any place to which she is assigned, or she talks too much and openly criticises the doctors and head nurses. Yet it is possible for an attractive, capable girl, who develops such undesirable qualities, to make a tremendous fuss and line up doctors, nurses and "outsiders" to protest against her being dropped. It may not be possible to lay one's finger on any really serious or flagrant offense which she has committed, yet the superintendent may be convinced in her own soul that the presence of that nurse is a real detriment to the hospital. How is she to convince her training school committee of the unfitness of that candidate? How long should such a pupil be carried on the staff?

It is extremely difficult in many cases to decide in a few weeks whether or not a given candidate is going to be fit or unfit. Many probationers are so self-conscious and awkward for some weeks that they do not show up their real worth. Some of our most troublesome pupils have in later years surprised us by developing latent ability which we had hardly suspected.

The most serious of all defects are the root defects in character which no amount of training seems to correct in some nurses. A good nurse is first of all a good woman, and we need to pay a good deal more attention to the woman we see before us than to the certificates or credentials she may carry in her handbag.

The *signing of an agreement* at the close of the proba-

tion period is customary in some schools. Its actual value is open to question. Many candidates regard it as unfair and sign it with inward protests. Unless the hospital board feels itself bound to give the candidate the quality of training which it has announced, and for which the candidate has entered, it is a question whether it is fair to ask for a written agreement. If it is prepared to do justice in the matter of training there is nothing unfair about it. The ordinary agreement which a pupil is asked to sign stipulates that she will remain throughout a certain required period of training; that she will abide by the rules; that if found unsuitable she must expect to withdraw; that if she withdraws without sufficient reason before a certain definite time she must reimburse the institution for what she has received.

There is No Injustice in Asking for Such an Agreement.—As a rule the hospital and school are established institutions—tested and proven. The candidate who enters such a school has the opportunity of knowing fairly well what she may expect to receive. The hospital in accepting her is taking a good deal more of a risk than she is. For a considerable time she receives from the school far more than she gives. Time and energy are expended on teaching her. The wear and tear and breakage of hospital supplies and appliances in unskilled hands costs more than she realizes. It is to the interest of the hospital to allow her to remain after having spent time, money and human energy in trying to develop her. If she proves reasonably teachable, conscientious, and dependable, she need not fear dismissal.

The dismissal or rejection of a candidate who has been permitted to enter for training is always serious to the nurse. The manner in which it is done is exceedingly important. It should never be done hastily and without

due consideration of all sides of the case; it should never be done in anger, from prejudice, or on the hastily formed judgment of a head nurse.

In most schools the principal or superintendent is given freedom to reject during the probation period without consulting her committee. After a probationer has been accepted and carried for months as a pupil of the school dismissal is a more serious matter and the wise superintendent should be glad to confer with her committee in regard to the case. Justice to the pupil demands that she be given a hearing before the committee if she so desires.

Undue harshness or severity in dealing with these problems is certain to react on the school and create a spirit of antagonism that is disastrous to an institution. A reputation for fair treatment of nurses and for making their life while in training comfortable and attractive, is one of the best assets of any school. A feeling that the authorities of the school have not justice and mercy as the ruling motives in governing the school, engenders suspicion and unrest and is always a hindrance to the real welfare of the institution.

FOR DISCUSSION OR REVIEW

1. Mention some reasons why character should be given first consideration in the selection of puplis.

2. In the light of present-day conditions show whether and why Florence Nightingale's tests of fitness for candidates should or should not be considered.

3. Give some reasons why hard and fast educational standards in hospital schools may not always result in the best selection of candidates from available material?

4. If the supply of desirable candidates is insufficient for the needs mention several ways by which the number of applicants may be increased.

5. Enumerate several things commonly met with which render a pupil unfit to continue in training.

6. Is it wise or just to require accepted candidates to sign an agreement. Give reasons for or against the practice.

7. Should a principal of a training school accept a pupil who has spent time in another school without inquiry as to reason for leaving the former school? Discuss this question in regard to justice to the pupil?

8. What consideration is due a probationer who has proven unacceptable during the trial period?

9. Has the fact that a pupil has been accepted and spent a year or more in a school given her a claim for consideration greater than she had during the probation period? If so, why?

10. Give some reasons why the principal or superintendent of the school should be left free to use her own judgment in such cases—some reasons why she should be required to have the consent of a committee, or of some member of the hospital board before discharging a pupil?

CHAPTER III

The Probation Period

The probation term is the most important period in the training of a nurse. The superintendent who is wise will make her plans in detail with exceeding great care covering this period.

Two things stand out as of special importance to be kept in mind in making those plans. First, that the probationer be taught carefully in correct methods of general nursing practice and supervised until such methods have become habits. Second, that she be given the ethical instruction she needs at this period to adjust herself in proper relation to all the varied officials and persons she must deal with in the hospital world. She needs to be assisted to get an ideal of service that will help to bring out the best that is in her, that will help her to make the most of the opportunities that are hers, so long as she proves worthy. The first impressions she receives when she arrives are important.

Different methods will have to be evolved in different hospitals to manage the teaching of correct practical methods. The important thing is to have a carefully thought out system of dealing with probationers when they arrive, and then adhere to the system. The first step is a firm resolution that no probationer shall be required or allowed to do any nursing duty until she has been taught how and how not to do it.

The instructor of probationers in the larger hospitals who can devote herself to the work will solve her own problems in this respect. She should upset the ward routine as little as possible while doing it.

In the smaller hospitals the staff of nurses available for teaching consists usually of the superintendent, an operating room nurse and perhaps one graduate assistant to the superintendent who supervises the bedside work. There may or may not be a graduate night supervisor but as a rule the actual teaching of correct methods will devolve on the three first mentioned. How is it to be done?

First plan for at least two to four or more probationers to arrive on the same day if possible. Admit pupils if at all possible in April or May and August and September, and group them in classes, for preparatory teaching. This can be done in the smallest training school if the superintendent wills it, and plans ahead.

Devote a good deal of time for at least two weeks to giving them a proper start. Have a list of the methods taught during those two weeks for which each graduate nurse is responsible. There must be a thorough understanding of the plans between the superintendent and her assistants. If the probationers arrive in the afternoon the superintendent should try to have a private interview with each one on the day of arrival. This may not be possible in a large school—it is possible in small schools. It means much to have this personal conference at the very beginning. It is more important than any lesson that can be planned. Give each a copy of the rules and emphasize important points. At the close of this conference, assign a selected chapter from the text-book on Ethics and ask them to read it carefully before they retire.

The first evening after supper call them into the bathroom of the nurses home or in the hospital. Give them a little talk on dust and its dangers in a hospital. Show them how and how not to sweep a room. Show them how to dust properly—with a damp duster. Emphasize

the place where damp dusters are not to be used. This can be done in a half hour. Emphasize proper care of the hands. Show how to clean a bathroom. Tell each one where and when to report for duty the next day.

The day after arrival have all probationers come on duty at the regular hour. Assign each one to assist a senior nurse to do the following things: All the cleaning for which nurses are responsible; answer bells to find out what is wanted; wash medicine and nourishment glasses; carry trays from the patients; stack dishes that go to the kitchen, and observe the ward routine.

At ten o'clock arrange for a demonstration on (1) how to give a drink to a patient lying on his back; (2) how to make a bed without a patient; (3) how to wash a patient's face, (4) how to place, remove, and cleanse a bed-pan and urinal.

Require each probationer to carry a note book or a slip of paper and see that each one lists the things she has been taught. Assign them a chapter in the text-book of nursing to be studied and have them underline points which are specially important.

Send them back to the senior nurses to assist only in the duties which have been taught. Insist on this rule being observed by all.

The second day at ten o'clock continue the demonstration on bed making. Show how to change a bed with a patient in it; how to brush out crumbs; how to adjust pillows; how to prop a patient up in bed; how to arrange the tray ready for a meal; emphasize the things not to do in connection with each. An hour is sufficient to demonstrate these properly.

At the end of the second day on duty, these probationers have learned to do a number of helpful and very necessary duties which they may safely do They have been taught several important things not to do.

The third day at a convenient hour show them how to give a sponge bath to a patient in bed; how to change the gown; how to rub a back; how to comb a woman's hair; how to cleanse the mouth and teeth of a patient who is convalescent, also a patient who is very ill.

The fourth day may wisely be devoted to teaching and demonstrating "comfort" methods—the numerous small things which a nurse may do to add to a patient's comfort—turning pillows and shaking them while supporting the head; adjusting a pillow beneath the knees; filling of hot-water bottles and proper care of them; brushing out of crumbs, removing wrinkles from sheet and gown; moistening parched lips, adjustment of lights and shades, use of small pillows to give extra support to a part; comfortable and uncomfortable management of the bed in general. How to make a patient comfortable will always be a most important part of the nurse's duty and it can hardly have too much emphasis.

The fifth day arrange for a demonstration on the use, cleansing, disinfection and general care of the sick-room utensils—bed-pans, urinals, fountain syringes and nozzles, how to properly fill a hot-water bottle and an ice-cap, points to be guarded in the use of each; care of rubber goods.

The sixth day may wisely be devoted to a talk on the patient, beginning with his arrival; what the nurse is expected to do for each new patient on arrival and why; show how to list clothing and care for belongings; emphasize points to be guarded. This can be done in a half hour.

At the end of one week by following a practical plan of this kind instead of having probationers floundering around picking up methods in haphazard style, as in the old regime, the school will have a group of young women who are safe and useful because they have been taught

properly how, and how not to do, a variety of practical things for the sick. If fifteen minutes have been spent previous to each demonstration in discussing some practical point in ethics which particularly concerns them at this period the probationers will enter their second week prepared to be useful assistants in the wards, better prepared to undertake real study from text-books than they could possibly be without this practical instruction. An exceedingly important point to emphasize is punctuality in the matter of assignments and appointments.

The first demonstration of the second week may be on how to give a simple enema; the substances commonly used; the importance of position; quantity, temperature, etc.—why and when an enema is a failure. Explain difference in methods when an enema is to be retained.

The second day of the second week the eighth demonstration may be on the making of surgical dressings and bandages, how waste occurs, how to avoid waste; care to be used in handling dressings of all kinds.

The ninth demonstration may be on how to set a tray; the serving of hot and cold drinks to patients in bed. Emphasize points to be guarded in regard to milk.

The tenth may be devoted to showing how to count the pulse and respiration—points to notice in different patients.

The eleventh may be devoted to temperature taking and the twelfth to the marking of charts and making of records.

Each day the probationer adds to her list the methods she has been taught and each senior or head nurse is instructed as to the things she may allow a probationer to do.

Contrast this method of preparatory instruction with the old way in which a probationer was thrust in to the

wards uninstructed and unprepared. The first duty which was assigned to the author when she entered on probation the evening of her arrival was to sponge a typhoid fever patient to reduce temperature. The second day she was giving baths and medicines to patients who had entered that hospital expecting skilled care. An important thing for each superintendent to ask herself is whether such a condition exists to-day in her hospital with her patients and probationers—whether it is worth while for her to devote one hour or less each day for two weeks to get probationers started with correct methods and to see that they "do the sick no harm." To those who have time and facilities for a full and elaborate course of preparatory instruction for probationers this method may seem unsystematic, crude, even illogical. It is not presented as an ideal method. It is a practical method of securing uniformity and exactness in nursing in a small school, of setting a standard as to the quality of work expected at the very beginning, of protecting both patient and probationer from the results of ignorant untaught nursing procedures, of giving them as far as possible what they are entitled to.

This method of preparatory instruction has required not over two to three hours each week from the superintendent and possibly, three hours each week from the two graduate nurse assistants—surely a wise expenditure of time in the interest of practical nursing thoroughness.

A point of general agreement is that it is wise to lessen the number of hours on duty in the wards during the probation period and increase the hours given to theoretical instruction and study. Assuming that much of the instruction for the first two weeks has been centered on ethics and practical nursing methods with perhaps one class each week in hygiene and bacteriology, the beginning of the third week will mean a lessening in the number of

practical demonstrations, and the beginning of anatomy and physiology classes. There is no general agreement as to the number of hours on duty which should be planned for probationers but not less than four hours each day nor more than six for the first two months is a good rule to observe. It is very much to the interest of both hospital and pupil to insist that as much of the foundation study as possible be covered in the first six months before the pupil is fitted to assume more serious nursing responsibility. Thorough class work at this period will make easier the work through all the remainder of the course.

The preliminary training in the Nightingale Training School at St. Thomas's Hospital, London, where Florence Nightingale's methods of training were first established, is thus described in an English journal and is full of suggestion to those who can arrange for two months or more to be spent in preparatory instruction before a probationer is allowed to enter the wards.

"The preliminary course lasts nine weeks, and all probationers must pass through this before being transferred to their regular quarters in the Nightingale Home. A good kitchen and lecture-room are reserved for the preliminary students in a part of the Nurses' Home, and here five sets of candidates are prepared every year. All the housework in this part of the establishment is done by the pupils themselves, save the cleaning of floors. They keep their own rooms clean and neat, taking turns at such parts of the domestic work as are done for the others as well as for themselves. The time-table, gives a good impression of the days spent in this department. The Preliminary Training School's syllabus of lectures embraces the following subjects: (1) anatomy and physiology, dealt with in thirteen lectures; (2) theoretical nursing, dealt with in twelve lectures;

"Preliminary Training School, St. Thomas's Hospital

No. 1. Time-table

Monday

6.30. Called.
7.40. Breakfast.
8.0. Prayers.
Housework.
9.15. Rooms.
10.0. Lunch.
10.30. Cookery.
1.0. Dinner.
2.0. Physiology lecture.
3.0. Off duty.
5.0. Tea.
6.0. Class or lecture.
7.0. Notes and study.
8.45. Supper.
9.15. Prayers.
10.30. Lights out.

Tuesday

9.15. Bandage-making.
10.15. Lunch.
10.45. Cookery practice.
2.0. Nursing lecture.
3–5. Off duty.

Wednesday

9.30. Hygiene lecture.
10.30. Lunch.
11–1. Bandaging and practical nursing.
2.0. Chemistry of food lecture.
3–5. Off duty.

Thursday

9.30. Physiology lecture.
10.30. Lunch.
11–1. Off duty.
2.0. Ambulance lecture.
3–5. Cookery practice.

Friday

9.15. Splint padding.
10.15. Lunch.
11–12. Bandage practice.
12–12.45. Study.
2.0. Hygienic lecture.
3–5. Off duty.

Saturday

9.30. Nursing lecture.
10.30. Lunch.
11–1. Practical nursing and bandaging.
2.0. Extra cleaning.
3–5. Off duty.

Sunday

8.40. Breakfast.
9.10. Housework.
10.30. Chapel.
Lecture.
8.45. Supper.

Hours not otherwise specified, same as Monday.

(3) hygiene, dealt with in twelve lectures; (4) practical nursing, dealt with in twelve lectures; (5) chemistry of food, dealt with in six lectures; and (6) ambulance, dealt with in six lectures. There are frequent examinations and test papers, and the abilities of the pupils, mental, moral, and physical, are thoroughly tested. The success

FIG. 1.—St. Thomas' Hospital, London.

of such work as this depends entirely on the personality of the sister in charge. It is the spade-work done in this preliminary training school under the direction of the sister, who is supported by a specially qualified assistant, that prepares the nurse to pass on to the full training of the Nightingale School.

Probationers in the Nightingale Home

"Candidates who pass their examinations satisfactorily after their nine weeks' course now enter the Nightingale Home and are admitted to two months' trial in the hospital wards. They are then, if found suitable under these new conditions, accepted for training as probationer nurses. They reside in the Nightingale Home, where all have a separate bedroom, materials for uniform, and an allowance for washing.

"*The working day for* probationers extends from 7 A.M., when they enter the wards, to 8.30 P.M., when they return to the Home for the evening recreation and supper. Out of this period of 13½ hours from 4 to 4¼ hours are allotted to exercise and to meals, leaving a working day in the wards and lecture-room of 9 hours.

"Each probationer goes through a course in general nursing, given by the sister tutor, during this first year, together with frequent class-instruction in elementary physiology and anatomy in continuation of the teaching given in the preliminary school. The aim is to render the instruction thorough rather than deep at this stage, where so many new impressions are being received. A great deal of what may be called 'consolidation work' is got through in this year, with the aim of grounding probationers in practical work until they become absolutely proficient. Monthly reports on the probationers' practical efficiency in the wards are sent to the matron by the sisters under whom they work. There are no

examinations during this year, but all note-books are returned weekly to the sister tutor that she may watch and guide the pupils' progress in technical and theoretical knowledge."

Training in how to work quietly should be an important feature in the probationary period. Few things are more frequently complained of than noise by the patient in the hospital of to-day. There is inherent in all of us the feeling that quietness is essential in caring for the sick. Probationers enter for training with the idea that noise is distinctly out of place in a hospital, but through the bad example of those older in service, and familiarity with suffering, they quickly fall into noisy habits unless much care is taken to prevent it. No amount of "silence" signs will accomplish what a few hours in the first three months spent in training nurses how to speak, move and work quietly will do. Such a lesson needs to be repeated frequently till "quietness" habits are established. It should be illustrated by incidents gained by observing how and where and why nurses fail in this respect. Nurses should be required to make observations on how noise occurs. In a well-known New England training school probationers are taught and later put through an examination in the handling of dishes and silver quietly when setting and cleaning up a tray, how to avoid noise in the use of brooms, dust pans, bedpans, garbage pails, milk cans, articles on the surgical carriage; chart files, opening and closing doors, regulating the water from a faucet, etc., also in regulating the tones of the human voice—the most prolific of all sources of noise.

Working to Time.—After the first three weeks when the pupil has become somewhat familiar with simple general nursing methods a few demonstrations on "working to time" should be arranged for. The pupil should be taught early in the course that time is too valuable to

waste in "dallying" over tasks or in doing things improperly and having to do them over again. Once they can be impressed with the idea that it is just as wasteful and foolish to take a half hour to do a task that should have been completed in fifteen minutes as it would be to spend a dollar for an article that could have been purchased for fifty cents—an important bit of progress has been made. All pupils will not need to be taught how to get work done quickly. Some pupils in every class will. The proper length of time to be taken, as a rule in doing routine duties can be definitely known and given as a standard to be reached. Also probationers should be taught the length of time it should take them to bandage a leg or arm, prepare and apply a hot fomentation, make a bed, give a bath, etc.

The patient's comfort should always be considered in working out the details as to time. Quite often it is found that the pupil who is never behind time in getting through is not careful to do the small things which add so much to the comfort of the invalid and which are rarely included in the general orders.

The necessity of punctuality in getting to meals, to classes, in giving medicines, treatment, etc., needs special emphasis in the probationary period if good habits are to be acquired.

Personal Hygiene.—Instruction in personal hygiene should begin with the entrance of the probationer to the school—not simply the theory but the practical application of hygienic principles which nurses need for their own safety and the safety of those with whom they come in close contact. Some special emphasis may wisely be given to oral hygiene. Consider the following instructions regarding hygiene issued by Florence Nightingale over her signature in 1878—forty years ago—compare it with practices to-day in training schools and try to meas-

ure the progress that has been made. If it is not possible to advance beyond what she taught—let us meekly try to follow her teaching in regard to hygiene and probationers.

"Each probationer will carefully study and attend to the following instructions: (1) Take care to pare the finger-nails close, to keep them, as well as fingers and hands, generally scrupulously cleaned. (2) Look upon anything which has soiled the fingers as a possible source of contagion or infection to others and yourself. You are desired to learn the nature of contagion and infection, and the difference between disinfectants and antiseptics. (3) Look upon a hang-nail or crack or scratch or pin puncture as likely to prove a poison nest to others or to yourself, even worse than an open wound or sore. (4) Such poison nests must be rendered harmless by first washing with pure water; secondly, by application of striptic colloid; third, by being covered with an india-rubber finger-stall. (5) Immediately *before* beginning any dressing, and in every case *after* a nurse has *touched* her patient, whether in dressing wounds, rubbing in applications, administering enemata, internal syringing, washing out eyes, ears, nose, mouth, the nurse must dip her hands into a solution of carbolic acid, 1 to 80, and then wash her hands and nails carefully with carbolic soap. (6) You are desired to remove soiled dressings with "dressing forceps," and not with your fingers, and on no account to scratch up adhesive plaster or other adhering dressing with your nails. (7) With all, "internal cases" the nurse is to keep her nails short, to fill the same with carbolic soap, and anoint carefully the finger she is about to use with carbolic oil, 1 to 20. She is to oil the tube or nozzle of any syringe she uses with carbolic oil, 1 to 20; otherwise, the appliance might convey contagious matter from one patient to another.

(8) No nurse who, after this warning, poisons her finger is fit to be a nurse. If she cannot take care of her own cleanliness, how can she take care of the patients?"

FOR DISCUSSION

Mention two points of special importance to be observed in making plans for teaching, during the probation period.

Suggest some reasons why it is necessary and wise to devote more time to class work with probationers than later in the course. Give a general outline for managing the preparatory classes before a probationer is allowed to assume nursing responsibilities when there is not a resident instructor to devote herself to teaching.

What length of time is required in the ordinary case to give a sponge bath for cleanliness; to change a bed with a patient in it; to prepare and properly apply a hot fomenation.

What are the principal reasons you would give in trying to impress a probationer with the importance of promptness and punctuality.

Discuss several phases of the subject of personal hygiene which should receive special consideration in the probation period.

A probationer who seems conscientious and inclined to be thorough is rarely ever able to get the tasks allotted to her done on time. She seems always to have a lot of half-finished tasks on hand. What measures would you use to help her in becoming a more rapid worker, and to keep her department in a neat condition while work was going on?

CHAPTER IV

The Course of Study and Training

The term "training school" suggests an institution in which instruction, discipline and practice are combined in the plan of education. The course of study should be worked out with a clear idea of the kind of product it is desired that the school shall produce, and where and how that product will fit into the world's needs and activities.

Is a common aim possible for hospital training schools in general? Would the following general statement of what a school should be aiming at fit the great majority?

First.—The building of sound character and proper ideals of conduct and life?

Second.—The development of technical efficiency and proper standards of nursing care.

Third.—The preparation of nurses to measure up to the demands of the age in which they live, and to apply their knowledge so as to benefit society as a whole?

What and How Much Should be Taught.—In the first decade of the twentieth century, opinions were fiercely divided on the question of what and how much nurses should be taught and how long the term of training should be. The length of time required to teach nursing properly has ceased to be the burning question that it was a decade ago, but there is still a wide disagreement on the question of how much should be taught. A more general agreement has been arrived at regarding the essential subjects to be included in the nursing course, but any one who studies the plans of different schools

in different states cannot fail to be impressed with the great diversity of opinion that exists in the matter of the amount of instruction that training schools are responsible for giving pupil nurses.

For example, there is a growing feeling that if a nurse has some instruction in elementary chemistry, she will have a more intelligent understanding about a great many processes which enter into her daily work. Acting on this conviction, a few schools, here and there arranged for a series of a half-dozen to a dozen demonstrations of chemical processes. From this simple practical addition to the course for first year nurses, the idea of teaching chemistry has grown, until now we find some schools arranging for fifty or more hours of instruction in chemistry, other schools arrange for no instruction in chemistry at all, and still others have taken and have kept to the sensible practical middle ground and arranged for a short course in chemistry, carefully arranged so as to give the nurse the instruction she needs and can make use of in her work, without burdening her with a lot of academic teaching that is not tied up in any way to her work, and that she will never be called on to use in any practical way.

Illustrations could be multiplied to show the extremes of opinion that still prevail in regard to what and how much should nurses be taught—particularly the point of *how much?* It is safe to predict that the close of the first quarter of the twentieth century will find the question of "What are the essentials of a nursing education?" still unsettled, still classified as an unsolved problem. Unless much care is exercised, a nurse "may easily find herself lop-sided, deficient in essentials, while unusually rich in non-essentials." A proper understanding of "the general minimum" is the first step to giving a well-balanced course. "One may classify any number of

subjects into: the essential; the useful but non-essential; the possibly useful; and those having no promise of any utility in the work of the average person."

Essentials of nursing are the things which concern all nurses: the skill and knowledge which every trained nurse who has a right to the name needs, whether her service is rendered in city or country, in home or hospital or camp, whether as an executive or an independent or obscure worker. Beyond the circle in which is included the essentials of nursing there stretch in all directions wide and alluring fields of knowledge. In attempting to teach the essentials, little by-paths have been started leading into these broad and attractive fields. To wander off and get confused ideas regarding essentials is as easy as to get confused in a strange city where a number of roads meet. These by-paths, many of them, lead to specialties to which nurses may legitimately aspire after a certain experience has been gained. No human being, nor organization, has a right to say to another human being, or class, "Thus far shalt thou go in the pursuit of knowledge but no farther." That right belongs to no one. Every nurse, in common with every other individual, has a right to develop her God-given talents as she chooses and finds opportunity.

Future Possibilities.—There is no real reason why the hospital pharmacists of the future should not be nurses who, having mastered the essentials of nursing and graduated as nurses, have followed up the elementary knowledge of drugs obtained by a full course in pharmacy. There are decided advantages in having the dietetic department of a hospital in charge of a nurse who has specialized in the branch of dietetics. If the matrons or hospital housekeepers were nurses who had, in addition to a nursing education, acquired a thorough knowledge of household science, there would be still

further advantages. It is more than probable that progressive physicians in the future will more and more choose nurses as assistants in pathologic laboratories; that they will find nurses who choose that line of work and are adapted to it, more valuable in such work as making blood-counts, analyzing specimens, etc., than many of the internes who now perform such service. Nurses have been and are being trained in larger numbers by leading surgeons to assist as anesthetists. Nurses have become expert surgical assistants. Nurses are being more and more used as assistants in radiographic laboratories. There will always be a demand for nurse teachers to give instruction in the schools. This demand is insistent and increasing. It indicates one direction in which training school work may wisely be expanded. Thus, these illustrations might be multiplied regarding special lines of work connected with the care of the sick, in which nurses may possibly engage. What new work will be demanded or entrusted to the nurses of the future no one can with certainty predict.

The Need of Differentiation.—In discussing a course of training for nurses few things at this time are more important than a careful differentiation between the instruction and training required by *all* nurses and the knowledge that *may* be acquired by nurses who choose these special fields of service.

It is manifestly impossible for the ordinary hospital school to provide for pupils to get in the short span of two to three years all the knowledge along these special lines that a nurse who specializes in one particular field will need—and it is unnecessary. Here and there are found schools which are advantageously situated, highly organized and well-equipped and manned, which certainly have an obligation for giving instruction beyond

that which can be given in the smaller school where teaching facilities are more limited. Yet the work done by the smaller school in the actual essentials can be as thorough and often is more thorough, than that given in many large schools—especially those dealing mainly or wholly with non-paying patients.

Training for Institutional Work.—The problem of training nurses for administrative positions in hospitals and training schools is one which so directly concerns hospitals in their everyday working life, that the conviction is gaining ground that some special instruction in regard to the duties that pertain to these administrative positions, and the methods to be used, should be offered to senior nurses before they leave the school. Not all nurses are fitted by temperament, personality and education to assume the responsibilities of executives in hospitals and schools, but in most classes or schools there are at least a few pupils who have in them the latent qualities out of which good executives are made. It is to the interest of hospitals themselves to discover these qualities—to assume this responsibility and provide opportunity for nurses to get a good working knowledge of what is required for successful work as an executive and some opportunity for practice—before graduation.

Keeping the Balance.—In all educational institutions there is an ever-present difficulty in keeping the balance between the different lines of study to be pursued. In the public school the regular teacher is frequently embarrassed by the amount of time consumed by the teacher of music or art or other special subject. It is interesting and somewhat comforting too to reflect on the fact that in the general educational field the same sort of problem has constantly to be faced—as to how many hours or terms and how much of this or that subject

a pupil needs and that the best educators of the country are working at the problem of trying to simplify and to make of more practical value the instruction given. The superintendent of schools in one of the largest cities of the country was asked recently about any special changes he was considering in the high schools of the city. He replied that he was studying on the problem of how to shorten the time now required to complete a high school course—reckoned as about twelve years—and so arrange the subjects that would be useful to any pupil so that instead of finishing the high school course at eighteen years of age, he would be as far along at sixteen and could get in two years of college work before he was eighteen. He believed that by carefully studying the pupil, especially his vocational possibilities as he entered the teen age period, and directing the instruction toward one special goal, by cutting out a lot of non-essential instruction which he would never profit by, at least two years might be saved and the pupil go out better fitted to assume real responsibilities.

A doctor,[1] writing recently in regard to medical requirements, suggests the dropping of a definite group of items from the course now required. "Eliminate non-essentials and get down to a basis of selection rather than election." "I present here," he states, "sufficient possible eliminations of non-essentials from the grades alone to shorten the medical student's course two full years, and I dare say that experienced educators looking to the making of practical medical men could readily eliminate at least another year from the college and medical course and still maintain a higher working standard than at present."

[1] C. E. Sawyer, M. D.

The following eliminations from the nine grades indicate the possibilities:

Arithmetic. (*a*) Elimination of all geometric work including cube and square root.

(*b*) Elimination of the more advanced work in percentages, interest and exchange.

(*c*) Elimination of all involved problems in arithmetic.

He discussed further eliminations from the study of grammar, history, physiology, and of much of the geography, and suggests giving special attention to social and economic phases of geography, instead of devoting so much time to physical subject matter and mathematical phases of the subject.

It requires a good deal of courage to-day for any one to suggest eliminating *anything* from the course in nursing that has gotten into it, but however commendable an object may be, it is possible to overdo it. "It is possible to deceive ourselves as to what constitutes excellency, because we have employed wrong rules of measurement." The very same methods of study employed by the writer just quoted, need to be used in regard to essentials and non-essentials for nurses, need to be repeated every year or two, and done by practical people who have a wholesome ambition regarding nursing education, and yet who are not easily carried away on sidelines which lead to nowhere in particular, which a nurse needs to explore during her undergraduate course.

The Length of the Course.—The trend of sentiment in regard to this question is shown in the following figures from the report on schools for nurses in New York state. Out of the 140 schools of that state "Ninety-two schools give three year courses; forty-three schools give from two to three year courses; five schools give two year courses."

The number of classes and class-room hours which

should be required before a nurse is allowed to graduate, is a question on which there always has been and there always will be decided differences of opinion. It need hardly be stated that a capable teacher with well-arranged teaching material who knows how to direct the study of pupils will accomplish results in ten hours, that a poor teacher with a poorly arranged text-book will fail to accomplish in twenty or thirty hours. It is easy to spend several precious hours in going through tedious pages to get at one point on a page which a nurse should not fail to get—yet without going through so many of those tedious pages she might get the same point without any waste of time.

It is easy to overestimate the value of multipled hours of formal or theoretical instruction in a class room, and to underestimate or fail to utilize the every-day opportunities for bedside instruction which must always be more or less informal—which are always valuable, and which depend so vitally on the spirit or ability of the department or ward head nurse who is in hourly contact with the pupils.

Superficial standards in nursing are easily set up and add immeasurably to the confusion of thought that prevails in regard to the instruction in essentials, and which do not improve the quality of the practical care given to the sick which hospitals are responsible for providing. Sir William Osler, Professor of Medicine at Oxford University, in discussing requirements and methods for medical schools has denounced in vigorous language the modern tendency to multiply class room hours and examinations and to set up superficial tests for medical students. "We have," says Dr. Osler, "made the study of our profession an intolerable burden by examinations and *the enormous expansion of the subjects of the curriculum.*"

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A point of general agreement is that the first year's study should be devoted to the foundation subjects—anatomy physiology including physiological chemistry, hygiene and bacteriology, practical nursing, with some work in materia medica and dietetics. It is generally agreed also that the study of ethics should begin with the pupil's entrance to the school, and be carried along at intervals throughout the course till graduation—endeavoring at each stage in the training to give such instruction as she seems especially to need and is in a position to profit by.

As a rule more class-room instruction is provided for in the first year than in any other year, but there is a serious danger of giving the pupil so much and such a variety of entirely new subjects, that nothing is well-digested, no part of the work really mastered. If these foundation studies have really been mastered, the pupil is ready to begin the second year's work with a study of different types of diseases and conditions to which the nursing principles which have been taught, will have to be applied.

The second and third year of training need to be considered together to a degree in deciding on the subjects which will be offered or required in each year. The conviction is gaining ground that if the class-room *instruction required for bedside nursing* can be completed largely in two years—a good deal can be done to make the third year more valuable to the pupil and to the hospital—and this without the sacrifice of any essential instruction. It is well to remember that in most schools the third year class is likely to leave the school at irregular intervals. In any school of any considerable size, even if the pupils entered on the same day, there is fairly certain, to be time lost by sickness of pupils or in the family, or time lost for other reasons—

that has to be made up—that will cause pupils who entered together, to leave the school weeks or months apart. A good deal of time has been spent in trying to elaborate on the subjects which should be taught in the first year, and comparatively little time or study spent on the very important subject of how to so arrange the work of the second and third years so as to yield the best possible results to nurses themselves, to hospitals, and to the community in general. It is easily possible to spread the instruction which a nurse requires for bedside instruction over three years; it is possible also to put the essentials of this instruction into two and a half years or even two years, and use the third year to give the nurse some specialized instruction which will render her a more useful worker, and to so enrich her personality that she is a more desirable member of any household or institution. The great difficulty in doing this is not lack of money or materials, but the lack of vision and determination to get out of the rut into which training schools so easily drop.

The ideal of uniformity in the plans and methods of training schools is a worthy ideal up to a certain point. Beyond that point it is a hindrance to the accomplishment of the purpose for which training schools and hospitals and nurses exist. A certain degree of uniformity in the subjects to be studied, and the relative time to be devoted to them should exist, but with a general standard for guidance and a minimum requirement, each school may wisely study how to use its own facilities and opportunities to give its nurses a kind of training that is *attractive and useful,* beyond the bare essentials.

While wide differences of opinion still prevail regarding the matter of minimum requirements which should be adhered to by all schools, it is worth while to go back a

few years and review the outline for a minimum training course approved by the American Hospital Association and which helped decidedly in making clear to a great many hospitals their definite responsibilities in regard to the school. Taking the country as a whole it is a question whether the great majority of schools are yet able to reach the practical standards set at the time this outline was prepared.

More attention is being paid to ethics now than a few years ago, instruction in chemistry is admitted to be desirable whenever possible—*if it can be definitely related to the work of the nurse*—and there is a growing feeling that more attention might be given to psychology or the laws of the mind which exercises such a powerful influence over bodily functions—but with these few additions, any school which reaches the standards set in this outline may very properly be said to have fulfilled its actual duties to its pupils. Some instruction in massage should be arranged for in the junior year.

"The committee[1] endeavored to outline a course which might be covered in two years, with three months of probation in addition—and a somewhat fuller course requiring three years. The outline for the preliminary course was the same for both courses and was as follows:

"Explanatory Note.—The preliminary schedule as outlined can be used for the two years three months course in the smaller hospital, or the complete three years course in the large general hospital. The teaching of these subjects in the preliminary course must of necessity be more or less elementary. It is not expected that they will be completed during the three months of preliminary training. This course should be amplified

[1] From report of special committee on Training Schools of the American Hospital Association.

and continued throughout the junior year, in association with subjects hereinafter outlined for the first year. This course has been constructed with the hope that it will provide the groundwork of the subsequent practical career of the pupil nurse in the school and hospital."

Preliminary Course

(*a*) Practice and theory of nursing—elementary.

(*b*) Disinfection, sterilization and protection against bacterial diseases—elementary bacteriology.

(*c*) Study of common drugs and their administration —preferably taught in pharmacy in class sections. See Clinics and Demonstrations, first year, No. 16.

(*d*) Dietetics, classification of foods, care of foods, cooking of foods, serving of foods. See Clinics and Demonstrations, first year, No. 15.

(*e*) Hospital ethics.

(*f*) Household economy. See Clinics and Demonstrations, first year, Nos. 1, 2, and 3.

(*g*) Hygiene and sanitation.

(*h*) Bandages and dressings. See Clinics and Demonstrations, first year, Nos. 9, 10, and 11.

(*i*) Elementary study of anatomy and physiology.

Junior Year

(*a*) Continuation of studies of preliminary course.

(*b*) General, medical and surgical nursing.

(*c*) Ward and bedside clinics and demonstrations.

Clinics and Demonstrations (First Year)

1. Beds; bedding; bed-making, with and without patient; management of helpless patients; changing beds; bed-making for operative patients; rubber cushions; bed

rests; cradles; arrangement of pillows, etc.; substitutes for hospital appliances.

2. Sweeping; dusting; preparing room for patient; disinfection of bedding; furniture, etc.; care of patient's clothing in wards and private rooms; disinfection of infected clothing.

3. Care of linen rooms; refrigerators; bathrooms and appliances; sinks; hoppers; bath-tubs, etc.

4. Baths—full, sponge, to reduce temperatures; foot baths; vapor baths; hot and cold packs.

5. Administration of rectal injections, for laxative, nutritive, stimulating, astringent purposes; care of appliances; disinfection of excreta.

6. Vaginal douches; methods of sterilizing appliances; use and care of catheters; vesical douches; rectal and colonic irrigations.

7. Local hot and cold applications; making of poultices, fomentations, compresses; methods of application; care of hot-water bottles; uses and care of ice-caps and coils.

8. Chart keeping; methods of recording bedside observations.

9. Making of bandages—roller, many-tailed, plaster, abdominal, breast; pneumonia jackets.

10. Methods of applying roller bandages.

11. Methods of applying other bandages.

12. Appliances to prepare for ward examinations and dressings; sterilization of ward instruments; nurses' duties during dressings.

13. Preparation of patients for operation; hand disinfection.

14. Preparation and care of surgical dressings, sponges, swabs, etc.

15. Tray setting and food serving; feeding of helpless and delirious patients; management of liquid diet.

16. Administration of medicines; methods of giving

pills, tablets, capsules, powders, oils, fluids; application of plasters, ointments, etc.; use and care of medicine droppers and minim glasses, atomizers, inhalers, hypodermic syringes, etc.; management of inhalations, eye drops, suppositories, etc.

17. Care of the dead.

18. Symptomatology—the pulse; correct methods of examining pulse; volume, tension, rhythm, rate, etc.; effect of exercise, emotions, baths, drugs, shock and hemorrhage.

19. The face in disease—the skin; expression, eyes, mouth, teeth, etc.; variations from normal, care of mouth and teeth; general observations of the body.

20. Respiration—normal, and in respiratory affections.

21. Pneumonia—respiration, cough and sputum; crisis and lysis explained and charts shown.

22. Typhoid fever—face, rose spots, temperature charts, changes in temperature and pulse explained; danger signals; prophylactic measures; methods of managing delirious patients, proper restraint, etc.

23. Specimens of excreta—urine, sputum, feces, etc.; nurses' duties regarding each; importance and general management.

NOTE.—The numbers signify only headings or divisions and should not be construed to limit the number of demonstrations or clinics.

CLINICS AND DEMONSTRATIONS (Second and Third Years)

1. Surgical technic. Preparations for operations. Nurses' duties during operations.

2. Preparation of antiseptic gauzes, ligatures, etc. Preparation for hypodermoclysis; for aspirating. Preparation of anesthetist's outfit.

3. Management of sutures and ligatures during operation. Instruments for common operations.

4. Surgical anatomy and surgical positions.

5. Surgical specimens—appendix, tumors, cysts, bone, etc.—preparation and general care.

6. Methods of preparing patients for examinations, inspection, percussion, auscultation, etc.—abdominal, vaginal; instrumental and non-instrumental.

7. Methods of arresting hemorrhage—external, internal.

8. Clinic on pulse and affections of heart and circulatory system.

9. Clinic on respiratory affections—pneumonia, pleurisy, asthma, tuberculosis, etc.

10. Fevers. Important symptoms in special cases.

11. Sepsis. Charts shown. Important symptoms and nursing points.

12. Children's diseases: rickets; teeth, general characteristics; skin affections of children; diseases of the eyes, ears, glandular system; comparison of symptoms in children with adults; marasmus; digestive disorders; adenoids, etc.

13. Orthopedic clinic. Bow-legs; Pott's disease; imperfect development; hip-joint disease; spinal curvatures; physical exercises. Adjustment of braces, extension apparatus, and corrective appliances.

14. Milk modification for infants according to different formulæ, also for fever patients and invalids.

15. Obstetric methods. Preparation for normal labor; for instrumental delivery; dressing the cord; care of the baby's mouth and eyes; massage of the mother's breasts; use and care of breast-pump; application of abdominal and breast binders; bathing and dressing the baby; management of obstetric emergencies, etc.

16. Demonstration of ophthalmic methods: washing out the conjunctival sac; applying drops to the eye; eye compresses; preparation for ophthalmic operations, dressings, etc.

17. Nursing methods in aural, mouth, and throat cases; preparation of field of operation in such cases; methods of feeding; uses of syringes, sprays, etc., nasal douches; taking a culture from the throat. Instruments for tracheotomy; intubation; care of tube, etc.

18. The uses of water for remedial purposes. External applications; spinal sprays and douches. Schott baths; Scotch douche with ordinary appliances; medicated baths, etc.

19. Internal applications of water: lavage; enteroclysis; preparation for intravenous infusions, etc.

20. Massage. Demonstration of methods: effleurage, friction, pétrissage, tapotement; methods of stroking, management of light and heavy treatments.

21. Massage: kneading, percussion, general massage; contra-indications.

22. Local massage—legs and abdomen.

23. Local massage—arms, head, and neck.

24. Physical exercises: passive and active movements.

25. Urine and urinalysis: simple tests for albumin, sugar, acidity, specific gravity, etc.

26. First aid methods. Bandaging, etc., in case of accident. Artificial respiration, etc.

27. Management of delirious and insane patients.

NOTE.—The numbers signify only headings or divisions, not the number of demonstrations or clinics. It is hoped that each school will utilize for teaching purposes such cases as will provide means of teaching practical lessons, endeavoring to provide as much variety in clinics and demonstrations as facilities afford.

THREE YEARS GRADED COURSE

"The outline for the three years graded course assumes that a hospital of seventy-five beds or more, offers at least, either at home or by affiliation, nursing in the following departments: Medicine, surgery, obstetrics, and diseases of children.

"*Preliminary Course of Three to Six Months.*—The outline for this course will be found on page 53.

"*First Year, Theoretical Work.*—"In addition to preliminary course the following:

Principles of nursing—thirty hours. Class recitations from text-books, or by topics or by lectures.

Fever nursing, including contagion, twelve hours.

Study of drugs and their administration, ten hours.

Measuring and determining body fluids, two hours.

Reviews and examinations, four hours.

"*First Year, Practical Work.*—Practical work of the preliminary course (as previously outlined) and in addition:

Medical nursing, three to five months. Fevers (non-contagious) and general medical affections of men and women.

Surgical nursing, three to five months. Including gynecology and orthopedics.

Vacation, three weeks.

It is recommended that two months of night duty be given in this year, one month in medical and one month in surgical wards.

The practical work of this year is also to be supplemented by bedside clinics as previously outlined.

"*Second Year, Theoretical Work.*—Study of drugs and their administration, ten hours.

Massage theory, one to two hours.

Anatomy and physiology, twelve to twenty hours.

Foods and food values, eight to fourteen hours.

Bedside clinics or lectures, eight to fourteen hours.

Obstetrical nursing—class recitations, ten to sixteen hours. Lectures, four to six hours. Demonstrations included in practical work.

Reviews and examinations, eight hours.

"*Second Year, Practical Work.*—Operating room experience, two to four months.

Nursing sick children, two to four months.

Nursing services in the special departments of the hospital, such as:

Department for contagious diseases.

Department for private patients.

Dispensary or out patient department.

Emergency wards.

Open air department, four to five months.

Massage, eight to twelve lessons.

Vacation, three weeks. Two or three months of night duty are recommended. The practical work of this year to be supplemented by bedside clinics and demonstrations as outlined.

Third Year, Theoretical Work.—Lectures and recitations on special subjects, six to twelve hours.

Care of the eye.

Care of the ear, nose and throat.

Care of the nervous and insane.

Diseases of the skin and venereal diseases.

Tuberculosis.

Contagions.

Hospitals not treating the classes of cases mentioned will lack in practical work and should devote more time to theory.

Ethics of private nursing, six hours.

Lectures on subjects allied to nursing, seven to fourteen hours.

Industrial and living conditions of the community.

Tuberculosis in the community.

Local milk and food supply.

Local charitable resources and relief of needy families.

Social service and charity work.

Settlements, visiting nurse work, school nursing.

Preventive work of the Board of Health.

The nurse's obligations to her school and to her alumna association.

Current topics related to nursing.

Lectures on subjects allied to nursing should whenever possible be given by specialists or experts.

Third Year, Practical Work.—Obstetrical nursing, two to four months.

Diet kitchen practice including milk modification, one to two months.

District nursing under supervision, one to two months.

Executive or administrative work (for pupils who show fitness), five to six months.

In charge of wards.

In training school office.

As assistant to night supervisor.

Vacation.

One to two months of night duty are recommended.

Each senior pupil should conduct, under supervision, at least one demonstration for the junior class.

The practical work of this year should be supplemented by bedside clinics and demonstrations as outlined.

The Two Year Course.—The exigencies of war and the need for a larger body of nurses than it has been necessary to provide for—has again called attention to the desirability of condensing the instruction in bedside nursing into two years with a probation term of three to six months additional. Considerable study is also being

NOTE.—Pages 52 to 60 quoted from report of committee of American Hospital Association.

given to the possibility of making the third year count more in benefits for institutions and nurses, by giving a course in executive or adminstrative work dealing especially with the duties of head nurses and training school principals.

Where a two year course is given, the school year— the period when classes are carried on and lectures given—needs to be not less than thirty-eight weeks, better forty weeks. The first year's work need not differ materially from the outline given for the three year course. The work on anatomy and physiology will need to be largely finished during the first year. Preceding the class work on diseases of eye, ear, and throat, the digestive tract, kidneys, circulatory system, also on obstetric, gynecologic, and orthopedic nursing in the second year, one or more class periods may wisely be devoted to the anatomy of the parts of the body to be discussed. This will arrange for at least twelve hours on anatomy and physiology in the second year and provide for the teaching to be definitely related to diseases and patients, and seems a more logical and sensible method of arranging for such classes in the second year.

The study of drugs and their administration will also probably need to be arranged for by assigning more hours to it during the first year, and the work in massage is now commonly included in the first year in many schools. By careful rearrangement of the class work, the second year can be devoted largely to the diseases of the various parts and organs and their nursing management, combined with the instruction in ethics, that nurses need at this period.

The practical work and instruction is always the most important part of the training. What a nurse knows in theory is outweighed by what she knows how to do in practice. Her business is to render service to mankind.

That is supposedly what the school is preparing her for. It is difficult to outline or enumerate every practical duty which a nurse should be proficient in before she is given a diploma. "New occasions teach new duties." New methods are being worked out every year, but for the present the following is a fairly comprehensive outline of duties to keep in view in regard to the training course.

1. How to sweep and dust a ward; when a damp duster should and should not be used; arrange ventilators and heaters; adjust shades and bedside tables; the care of stoves, dish-towels, cupboards, and refrigerators.

2. How to make a bed with and without a patient; adjust back-rests and pillows; change the bed with a helpless patient; disinfect beds, mattresses, and bedding. How to prevent bed-sores; lift and move a helpless patient; care for the hair; how to manage bed-pans and urinals; to fill and apply hot-water bottles or artificial heat of any kind, and the precautions to prevent burning.

3. The special points to be observed in the cookery of meats, eggs, toast, and special nourishment for invalids. Tray setting and attractive serving.

4. How to give a bath to a patient in bed; how to care for the mouth and teeth; how to change a gown with a helpless patient.

5. How to use a clinical thermometer, count the pulse and respiration, mark a clinical chart, and keep a daily record.

6. How to keep a bathroom in sanitary condition; disinfect urinals, sputum cups, bed-pans, rubber sheets, pus basins, and bath-tubs.

7. How to administer medicine by mouth; to read and understand the abbreviations and symbols in common use in a hospital; the precaution to be used in handling all drugs; the special precaution in giving opiates and

sedatives; the best way to give oils, powders, stimulants, and purgatives.

8. How to give medicine by hypodermic injections; by rectum; by injection; by inhalation; by simply applying to the skin; how to apply ointments, and the points to be remembered and guarded against in the use of each.

9. How to prepare and give a simple enema; how to pass the colon-tube; the precaution to be used in giving stimulant, sedative, and nutrient enemata; how to relieve an overloaded and impacted rectum; how to give a colonic irrigation; how to care for each utensil before and after use.

10. How to save specimens of urine and other excreta for examination; how to pass the female catheter; how to test the specific gravity and reaction of urine; the simple tests for albumen and sugar; how to ascertain the quantity passed in a given time; the points to be observed and noted regarding urine in special cases; how to give a vaginal douche.

11. How to receive new patients; list and care for their clothing and effects; care for hospital linen, blankets, and rubber goods.

12. How to arrange a patient for an abdominal examination; the nurse's duties regarding general examinations of the whole body; how to arrange for examinations of the chest with patients in and out of bed; how to assist during an examination of the spine, rectum, and genital organs.

13. How to sponge to reduce fever; fill and apply ice-caps and coils; give injections of ice-water; apply hot and cold packs; the use of the bath thermometer; how to restrain delirious patients; general and specific precautions to be observed to prevent infection; the special method of reducing fever preferred by the hospital physicians.

14. How to prepare and apply hot fomentations; ice compresses; poultices; sinapisms; antiseptic compresses; blistering agents; the care of blisters; arrange for moist air and medicated steam; improvise a croup tent with provision for steam inhalations; manage the use of gargles, sprays, and other applications to the throat.

15. How to prepare and apply roller bandages to head, arms, breast, feet, legs, abdomen, and hip; perineal bandages; many-tailed bandages; how to support an injured arm or leg.

16. How to dress and assist a weak convalescent patient; to prepare and serve fluid food to invalids; the points to be observed in feeding milk; methods of predigestion; the classes of diets and amount to serve; the diets suitable for special diseases and conditions; special precautions needed during convalescence; how to weigh infants and adults.

17. How to syringe ears and cleanse eyes; how to manage eye compresses and drops; how to evert eyelids and make local applications; how to manage a nasal douche.

18. How to disinfect a room and its contents; arrange for sulphur and formaldehyd fumigation with ordinary appliances; how to manage infectious diseases in private homes.

19. How to assist the physician in aspirating and tapping; how to manage diaphoretic baths; dry cupping; lavage; enteroclysis; hypodermoclysis; spinal douches; Schott baths; medicated baths; Scotch douches.

20. How to properly care for the hands in the daily routine; hand disinfection; sterilize ward instruments and cleanse after use; prepare a patient for operation; arrange beds for operative patients; care for patients immediately following operations; special observations to be made regarding laparotomy patients; management

of all classes of cases requiring drainage-tubes; best methods of lifting and handling surgical cases.

21. How to prepare plaster bandages; dressings for ward use; management of adhesive strapping; pad-splints; manage extension apparatus; give first aid in fracture cases; undress accident cases; points to be recorded concerning accident patients.

22. The significance of symptoms and how to make and record observations; how to manage a condition of shock; check hemorrhage in emergencies; the measures to be used in giving first aid to cases of poisoning by opium, strychnin, and carbolic acid; to prepare and administer emetics; how to care for burns; how to administer oxygen.

23. How to calculate the amount of drug needed in preparing a given quantity of disinfectant solution; to make all the solutions in common use; the special precautions to be used in regard to each; how to prepare simple antiseptic mouth-washes from common materials; the effects on tissues of too strong solutions.

24. How to get ready for an operation in a hospital without assistance; also in a private home; how to assist the surgeon in minor and major operations; the care of rubber gloves, ligatures, and sutures; the emergency remedies and applications that should be in readiness; the principles and methods of sterilization; the adjustment of patients to different positions on the operating-table; the after care of the wound to prevent infection. How to make and apply abdominal bandages.

25. Preparation for lumbar puncture; how to assist the orthopedic surgeon; management of common orthopedic cases.

26. The making of tampons and vaginal applications; adjustment of pessaries; how to irrigate a bladder; use the vaginal speculum; remove and apply vaginal pack-

ing; disinfect the vagina for operations; the common positions used for vaginal examinations and treatments; how to prevent strain of the perineum and sphincter; management of intra-uterine douches; prevention of infection of perineum after operation; removal of stitches; uses and management of vaginal suppositories and applications; general management of gynecologic patients.

27. How to arrange an obstetric patient for examination; how to assist the physician during such examinations; the preparation of the patient for labor; the preparation of bed and rooms; the appliances desirable and those absolutely necessary for proper management during parturition; the nurse's duties during a normal labor when the physician is present and when he is not; the care of the patient immediately following delivery; measures to prevent hemorrhage.

28. The care of asphyxiated infants; care of premature babies; first care of the newborn; management of the eyes and cord; general care needed during first two weeks; how to guard against infection of breasts; how to treat fissured nipples and manage inflamed breasts; the uses of ergot in lying-in patients; how to give and when not to give ergot; the use and care of the breast-pump; special care needed during puerperium; management of abdominal and breast binders; proper feeding of lying-in patients; advice to give prospective mothers; how to prepare artificial food for infants; simple measures for increasing or decreasing flow of milk.

29. What to do in a simple case of infantile diarrhea or "summer complaint" if no physician is available; preventive measures in relation to such diseases; the chief causes of constipation in children; preventive and relief measures; the management of a case of thrush; what to do in case of convulsions in children; in case of spasmodic croup while awaiting a doctor; management of

whooping-cough, measles, and other common children's diseases.

30. Simple measures that can be used for the relief of insomnia, general massage; when not to use massage; massage of special parts of the body; resistive movements and simple gymnastic exercises.

31. The arrangements necessary for outdoor treatment of pneumonia and tuberculosis; instruction to be given the family and patient, and general care of the tuberculosis patients.

32. How to improvise hospital appliances out of common things in emergency; how to feed obstinate or insane patients.

33. How to devise occupations and entertainment for children and adults during convalescence.

34. Care of the dead.

CHAPTER V

Concerning Teachers

Some one has remarked that a teacher is not a dealer in intelligence or information, but rather, *one who is familiar with the technic of study*, one who knows how to guide a student so that work is accomplished without waste of time and effort.

Good teaching has been defined as the art by which the right people impart the right kind of knowledge to the right pupils at the right time. It includes not only imparting the right kind of knowledge but also showing how such knowledge is to be applied in daily practice. Schools for nurses have one great advantage in that they offer the student opportunity to at once use much of the knowledge they have acquired, and to see the result of its application throughout their whole course.

In a study of the programmes of the leading training schools of today, as compared with the programmes of the same schools eight or ten years ago, one who closely observes will be struck with one particular phase of the plans. The number of *nurses* who are expected to conduct classes—to *teach* in such schools—has doubled, trebled, even quadrupled in some institutions. A few years ago the superintendent and the principal were the only ones in the institution who expected to be called to take charge of a class of nurses, and these often undertook the class work with fear and trembling. They knew how to do the practical work—the teaching was another matter.

The Successful Teacher.—There is an idea quite prevalent that teachers, like poets, are born, not made. The idea is fallacious. We cannot know whether or not we can teach, till we have tried. Neither did we know we could walk until we tried. Experience has clearly shown that the greater number of successful teachers are such, not chiefly because of native talents, but because they have been determined to study the art of teaching, of class management; because they have had an ambition to do the teaching well, because they have diligently prepared for teaching. The very best inherited talent must be improved by a study of the elements which make for success in teaching, just as is true in music or any other art.

The successful teacher is one who likes to teach, who is enthusiastic about the task, who enjoys the contact with pupils, who has patience with their shortcomings and is on the alert to improve her methods. Temperament will influence success to a certain degree, but the will or determination to teach effectively is the starting point. Given these, if Nature has endowed us with an average number of talents, we can do fairly successful work as teachers. The best teachers are always keenly anxious for suggestions as to how they may improve in their teaching. They are always studying *how to teach.* Even after years of successful teaching, they will tell you they study every lesson carefully; they never go before a class without a lesson plan in mind.

As in general educational work, the pupils are graded according to age, experience and general attainments, so in the successful hospital school there must be a system of grading, with teachers who have specialized, to some degree at least, on a particular grade and study. In the average hospital school not more than three classes can be easily managed. Every training

school should have at least two classes. Few, if any, teachers will do equally successful work with beginners in the school of nursing, and with the class about to graduate, and no school will really be successful which selects its teachers, haphazard, for pupils in these different stages.

The visiting instructor is a product of the twentieth century so far as hospital schools are concerned. She is generally a nurse who has developed her teaching ability and has specialized on a few important branches—frequently some of the foundation studies of the first year. Experience has shown that the best results are obtained by carefully limiting the number of instructors for the first year, and adhering closely to text-books till a good working knowledge of fundamentals has been obtained.

The Resident Instructor.—The nurse whose special department is the class room, has come to stay in many schools. She has made a very distinct place for herself, and few schools who have once had a capable resident nurse instructor, would be willing to return to the old system where most of the instruction was given by the visiting staff or an overtaxed superintendent. Frequently the superintendent was too burdened with executive duties to do justice to her task of teaching. Frequently the voluntary lectures scheduled to be given by members of the attending staff were irregular and lacked careful preparation.

The physician who takes time to prepare for his class work is invaluable in certain subjects. His best work however will be as an instructor in the latter half of the training period. It by no means follows that because a man is connected with two or three hospitals and a medical school, he will give a satisfactory course of lectures to nurses. The fact that he is in such demand

is often a good reason for not depending on him. Some lesser light would in all probability give more time to preparation and take more interest. Many schools have been crippled by depending on men who were too busy to attend to the work they allowed themselves to be advertised as doing.

The best teachers among physicians will be found as a rule among the younger men who have had a few years of experience. Occasionally a doctor shows such marked ability as a teacher that it is worth making a special effort to secure him at least for one weekly class throughout the school year, and paying him a good rate for such service.

Sometimes—an *ambitious* interne will do better class work with anatomy, physiology, materia medica and bacteriology than the most brilliant man on the staff, because he is keenly interested in his task, and ambitious to become a successful teacher—which his chief is not.

The older men however can bring from their own experience and years of thinking—a kind of instruction that nurses need and that no inexperienced medical man can supply.

The specialist should be secured not perhaps for the entire teaching of his particular branch but at least for a review of the more important points relating to the nursing of patients needing his special treatment.

The graduate head nurse is a teacher whether she so considers herself or not. She is teaching all the time by example, and, next to experience the best of all teachers is a good example. Because no one has the opportunities for instruction that the head nurse has in her daily contact with pupils, the superintendent who is wise, will make definite assignments as to teaching for which each head nurse is responsible. Much complaint about the unwillingness of head nurses to assume any

responsibility for instruction comes from the failure to make definite assignments as to what they are expected to teach, and to require a report each week or month as to what they have taught the group of pupils assigned to them.

One of the best ways to begin is by making the head nurses in turn responsible for conducting a quiz class with a certain group each week. One good effect of this one quiz class each week is that it markedly stimulates the head nurses to continue their own studies. Where there are a number of graduate head nurses, the subjects on which they will be expected to serve as tutors—outside of the practical bedside work, should be assigned at the beginning of each school year, so that they may have ample time to refresh their own knowledge of the subjects.

In the teaching of nursing methods there should be a general agreement throughout the school as to which method is to be taught. There may be more than one satisfactory way of doing a thing, but if a pupil nurse is taught a different method by each head nurse she cannot be blamed for inaccuracy or unexactness or for thinking that "any way will do."

Faculty meetings in most schools and colleges are considered an important item in the general program of the schools. They are important in schools of nursing if uniformity and thoroughness are to be secured and serious mistakes avoided. The faculty of the training school will include the physicians and internes who are appointed for lecture or class work, the dietitian, pharmacist, if he does any teaching, massage instructor, the head nurses, the principal and her assistants. It may not be necessary for all these instructors to attend every faculty meeting, but at least once each year they should be called together to go over the general plans and progress of the school and to discuss plans for improvement.

The principal and head nurses may very wisely plan to meet at least fortnightly for conference at which times the decision should be made as to changes in methods and management. No better method of securing uniformity has been discovered—where several head nurses, graduates of different schools, are working, than to consult each one as to her choice of method, and after full discussion, decide on the method to be taught throughout that school.

Much friction and many accidents will be avoided once this plan is adopted. Different head nurses trying to enforce different rules regarding hot-water bottles when used with helpless or unconscious cases, have many times resulted in confusing the pupil nurse and injuring the patient. The same thing is true where poisonous drugs are concerned. No one has meant to be careless about them, but somehow, confusion in regard to how and where they should be kept and handled, has led to a mistake and not infrequently to a death.

The main difficulty in regard to keeping up interest in faculty meetings and fortnightly conferences has been the failure to make preparation—the lack of a definite programme for each meeting. The busy executive who does not make out a definite programme in advance for each school year or semester is fairly certain to meet this difficulty in maintaining the active interest of the group of instructors, There is no lack of subjects, many are of vital importance to the school, but failure to plan a programme ahead and assign topics will effectually kill the interest and nullify their value.

A few lectures on teaching given to the head nurses or the training school faculty by the principal of the nearest high school or by some enthusiastic teacher who is doing successful work in the general educational field—arranged for at the beginning of each school year will accomplish

much in creating the desire to become efficient teachers.

It should be made clear to the lecturer on pedagogy that *general* talks are not desired—that what is wanted is a concise presentation of such principles of teaching as are of universal or very general application.

What the average head nurse needs is a bit of inspiration to excel in teaching; the creating in her of a "divine discontent" with mediocre efforts in the line of teaching, a little opening up to her of the way to improve her methods, and if she is of the right stuff she will work at the task of "training herself" till she may, later on, be surprised at the success of her own efforts when viewed in the light of actual things taught and pointed out, and in real development of the pupils entrusted to her.

A few books on teaching should be provided to be loaned to head nurses. A visit to the teacher's section of a public library will be time well spent. With note book in hand the titles of a dozen books on the subject of teaching can be made which will be valuable additions to the training school equipment. If effective work in teaching is to be expected from head nurses, the best possible tools should be provided. Books are teacher's tools. So are charts, pictures, blackboards and a good reference library and none of these are impossible to obtain, once the determination is made to have them.

If the principal is keenly desirous of improving her training school, let her first get a clear vision, herself, of the kind of training school she wants to have—the improvements she wants to make. Let her not lament that she hasn't a school with a hundred beds "always occupied," until she is absolutely sure that she is using the teaching possibilities she already has in her thirty-five or forty beds to the utmost. Let her not be content with poor teaching because she has not a paid resident

instructor to take charge of class-room work and elaborate equipment—until she has made the best possible use of the graduate assistants she has, and done all that is possible to improve teaching methods. Some of the most capable nurse teachers in America today received their primary training in small training schools, just as some of the most notable figures in the medical world hold diplomas from comparatively small obscure colleges. They have succeeded because they insisted on continuing the work of educating themselves and have been willing to sacrifice in order to attain a higher development.

FOR DISCUSSION OR REVIEW

1. Show how the present system of nursing has been evolved.
2. Mention some of the qualities of a successful teacher of nurses.
3. Give some principles which should be observed in selecting teachers in a hospital school.
4. Outline some methods which are useful in developing the sense of responsibility of head nurses in regard to instructing pupils.
5. Show why uniformity of methods throughout a school is necessary for good results.
6. What is the value of periodical conferences between principal and head nurses.
7. Mention some points which are important to observe if interest in conferences and faculty meetings is to be created and maintained.

CHAPTER VI

Some Principles and Methods of Teaching

The management of a training school deals with its organization, the selection of its officers, its faculty, the arrangement of its curriculum, and with the correlation of all educational factors.

Method deals with the principles upon which good teaching must be based, and with the means of making each subject in the curriculum produce the best educational results.

At least five methods of instruction may be used to advantage in a hospital training school in addition to regular bedside instruction.

Instruction by recitation, in which the pupil prepares herself by careful study of a prescribed section of a text-book.

Laboratory exercise, in which the pupils perform for themselves various experiments under the supervision of teachers.

Practical demonstration, in which the teacher performs for the whole class certain experiments or illustrates some nursing procedure.

Illustrated lecture, which may supplement the standard text-books or be entirely independent of any text-book, in which charts, blackboard, and all aids to teaching are freely used.

Conferences in which announced topics are informally discussed by teacher and pupils.

The two great coördinate aims of education are that people may acquire knowledge and develop power or skill and any method which helps in the attainment of these objects should be employed.

Essentials of Teaching.—Teaching implies the existence of two factors, one imparting, the other receiving instruction. Professor Hart, in making a distinction between the hearing of recitations and the real teaching process, says; "A pupil recites lessons when he repeats something previously learned. A pupil is taught when he learns something not known before. The two things often indeed go together, but they are in themselves essentially distinct. Teaching is causing another to know."

"Teaching," says another writer, "is simply helping the mind to perform its function of knowing and growing.

"Teaching, in its simplest sense, is the communication of knowledge, the painting in another's mind the mental picture in one's own mind, the shaping of a pupil's thought and understanding to the comprehension of some truth—the making it common to the two.

"Teaching is arousing and using the pupil's mind to form in it a desired conception or thought.

"Learning is thinking into one's own understanding a new idea or truth."

Perhaps one of the first lessons that needs to be grasped by one who desires to attain to efficiency as a teacher is that *talking is not teaching;* neither is telling, teaching. The repetition of facts and theories is not teaching. Teaching includes the two-fold process of imparting instruction and learning. Neither along constitutes teaching. Direct telling is rarely good teaching.

The object of all teaching is the cultivation of intelligence in a particular branch, the development of worthy ideals and sound character, and the ability to apply the knowledge to practical conditions.

The principle of teaching from the known to the unknown is one of universal application. Nowhere can better illustrations be found of this principle than in the Bible

where the methods of the Master-Teacher are shown. There the deepest spiritual lessons were taught to individuals of varying intellectual development, and the approach of the lesson was almost invariably made by reference to some common thing understood by every one—a grain of mustard seed, leaven hidden in meal, sowing the seed, a drink of water, children at play, how flowers grow, branches and vines, etc.

Compare this simple direct method of teaching with some of the attempts at teaching observed in some training school class rooms, and it is easier to understand why probationers so often fail to learn lessons that consumed valuable energy and time, and that were supposed to be taught to them but were a failure in real results. Studies in bacteriology, materia medica and dietetics especially, have been made unnecessarily difficult, because, before the first principles had been grasped, the pupil's mind was confused by the repetition of a great many new words and phrases which in his mind had no connection with any fact that he really understood. The efficient teacher will make his approach to a lesson cautiously, building up the new idea to be taught on something that the pupil is thoroughly familiar with.

Having a lesson plan is exceedingly important if interest is to be secured and real teaching done. Many of the very best teachers have an outline or plan for every lesson. They know before they go before a class how they are going to begin, the points which they expect to emphasize, how they expect to close. Important questions bearing on the lesson are written out. They use copious notes and do not try to carry a lesson plan in mind. They study not only the subject matter of the lesson but the method of handling it so as to get the desired results.

Four Things are Necessary to Intelligent Teaching.—The

teacher must know the pupils—their individual needs and attainments; she must know what she is to teach; she must know how to teach it; and there must be a common language. The pupil must understand the words employed if learning is to take place. "The mind grows on what it assimilates," and for this reason it is essential for the teacher to test the pupil's knowledge and measure her ability before beginning the teaching process. This is perhaps more necessary in nurses' training schools than in many other departments of education, since in such schools are found pupils of very variable attainments. The young woman who had not attempted study for ten years before entering the hospital is put side by side with the college graduate who has all her life been a student. Natural ability will often overcome the lack of early education, but if they are to be graduated equally proficient, there must be some individual attention and direction as to methods of study. Individual defects should be noted and emphasized with a view to their correction.

Studying the Pupil.—In addition to the teacher of nursing knowing *what* she is to teach, she must know *whom* she is to teach—not merely their names and how long they have been in the school, but their individual capacities, attainments, and needs, their habits of thought, characteristics, and tendencies. Taking things for granted is a common failing, and rarely justifiable. There is next to nothing of importance in the study of nursing, the knowledge of which it is safe to assume is possessed by the pupils until the actual test has been made. So as long as a nurse is supposed to know what she does not know, it will be impossible to cause her to understand clearly any fact in the regions beyond where this primary knowledge is essential.

Keeping the Goal in View all through the Teaching and Training is Important.—We are not simply giving so much

instruction so that a nurse may be able to go out and earn twenty-five or thirty-five dollars a week, even though many of the nurses may have entered with the economic aspect of the training as the most prominent in their minds. In a thousand ways, in the course of the every-day classes and work, we can call attention to the needs of the world which nurses of the right kind are needed to meet. "Train up a child," says an ancient teacher. Up to what is he to be trained? What are the ends or goals we have in view for the pupils in the school? If a young woman has chosen to enter the field represented by the care of the sick, are we doing her justice if we allow her to move around in one special institution for two or three years without calling attention constantly to the great field relating to the sick outside the walls of the hospital in which she lives, to the ideals which a Christian civilization has built up in regard to management of all forms of sickness, and the part which she is expected to play, or may play, in making conditions better along various lines so that sickness may be lessened.

However thorough may be our pedagogical methods and our professional instruction, if we are neglecting to create *aspirations—wholesome ambitions* in our pupils, weaving in with every lesson right ideals of service to mankind, we are failing to use to the fullest extent the teaching opportunity. There is a very vital relation between the three questions—"What do you know?" "What can you do?" and "What are you?" which the wise teacher will never lose sight of. Each question represents an advance on the other and from these three we may build proper standards of service to mankind. There is a great deal of instruction not contained in any text-book which a pupil needs and which goes into the making of efficient teaching, which a well-equipped teacher should know how to utilize in the training of nurses.

Securing the Pupils Coöperation.—It is well for a teacher to remember that the average training school class is made up of individuals whose life responsibilities have been widely different and who bring to the study of nursing, a background of experience that may be very helpful in some cases, and useless and harmful in other cases. Some pupils bring with them a strong determination to succeed, which is the first element in real success. Others are weak-willed, lacking in resolution. Others are brilliant in theoretical work and often poor in practical duties. Others are slow in grasping new ideas —belong to the plodding type who have to work harder but eventually arrive. Many lack accuracy and have never worked by any real *method.* Others allow their minds to be so taken up with outside interests that their studies suffer. Some quickly develop habits of study and enjoy it. To others some of the subjects are so difficult that as far as possible they evade studying and hope by some lucky chance, or perhaps a cramming process extended over a few weeks, to get through somehow. The ability to do *finished* work without supervision is all too rare a quality in present day pupils.

All of these varying types will need a little different management. Fifteen minutes spent out of class with some pupil who is having a difficult time with some special subject, will often change a discouraged pupil who seemed dull, into an interested successful one, because she has been shown how better to plan to study.

The girl who hates study is a type commonly met with. Why does she hate study? How can her attitude toward her studies be changed? Quite often the textbook and the teacher are more at fault than the pupil. Some books are so badly arranged that the brightest pupils only get their contents after hours of unnecessary labor, and the pupils whose minds are less alert get them

not at all. The best teachers often find difficulty in handling some text-book because of defective arrangement of the subject matter.

Open and Shut Minds.—In most classes, while there may appear to be many types of mind, there are but two really important types—open minds and shut minds. The pupil who is mentally alert, full of questions, may often be troublesome, but she represents the class from which the leaders of the future must come. She has an open mind, is always hungry for more knowledge regarding her work.

The pupil with the shut mind who seems indifferent, lacking in ambition to do well in any branch, represents a real problem. Can she be waked up? Can her ambition be aroused? If she is worth retaining in the school she is worth having a real effort made to shake her out of her indifferent habits. Such a pupil needs serious study of her case and careful personal work in regard to her studies, on the part of the teacher outside of the class room. The most effective teaching in her case will not be done in class.

Attention and interest in the class are essential if real teaching is to be done. The teacher who is successful must know how to secure attention and make even a dry subject interesting. It can be done.

The manner of the teacher should show alert interest, self-possession, and mastery of the subject of the lesson. No teacher should complain if she does not get attention or active interest from a class if she has not put vim, quickness, and force into it.

The wise and free use of illustrations is of such great value in securing interest, that every teacher should be on the alert to secure the best illustrative material.

Since knowledge is of no value until it is applied in real life, the successful teacher must know how to tie up

the lessons as far as possible to the pupils every-day experience in the wards.

FOR DISCUSSION

If called upon to reorganize a school with fifty pupils beginning in the early autumn, what general plans would you make, considering that no instructor was available to devote herself mainly or wholly to class work?

What kinds of nurses do you desire to produce as a result of the teaching plans that are made?

Discuss the proportion of nurses who enter private nursing ranks, institutional work, and public health nursing, and show how your plans are well adapted to produce the types of nurses most in demand.

The fact that general hospitals admit only acute cases as a rule, and that a great many of the calls for private duty nurses are to care for men and women, past middle life, and with some form of chronic ailment, creates a difficulty in the matter of producing the type of nurses required for patients who have a protracted convalescence or a chronic disorder. What measures would you try to use in your school to overcome this difficulty?

What do you consider is the best test of the value of any teaching method?

What is the difference between culture and knowledge? Which do you consider most necessary to aim for in your training plans?

Mention one of the important principles of teaching which is almost universally observed by good teachers and show how this principle may be observed in teaching probationers.

CHAPTER VII

Some Principles and Methods of Teaching (*continued*)

The Recitation.—One of the primary objects of a recitation is to find out what the pupil knows and how she knows it. She may have memorized the exact words of the text-book and yet utterly have failed to comprehend the meaning of the subject matter. Another object is to find out what the nurse does not know about the assigned lesson, and to aid her to a clear interpretation of the lesson.

A fourth object is to explain difficulties upon which the class or any member of it may have exhausted their efforts. It is well to make it a general rule never to explain a point until the whole class has done its best upon it.

A fifth purpose of the recitation is the development of the pupil's powers of original expression.

The whole recitation should be conducted for the benefit of the class, and pupils should be expected to recite to the class rather than to the teacher.

The lecture system in teaching takes it for granted that each pupil is ready and able to make an intelligent effort at acquiring the knowledge given out by the lecturer. The taking of notes is an important part. The submitting of these notes for inspection and correction is fully as important. Its real value in a nurses' training school is a question on which there is a wide difference of opinion. A rambling lecture, lacking plan in the lecturer's mind, cannot produce any important results in a nurse's education. Many nurses are experts at seeing the important points and getting them down quickly. Others

fail. In medical schools there has been a decided change in methods of instruction in recent years. More reliance is being placed on study from text-books and the recitation plan, and less on the professor's lectures. A distinct gain will be found in a nurses' school when the text-book plan is more generally used in all the fundamental branches. Special lectures on subjects not generally included in text-books will be found helpful in the second and final year of training.

A point to be guarded in all class work is in regard to wandering away from the subject or assigned lesson. Quite often a question asked by a pupil will lead far away from the lesson if the teacher is not alert at "sticking to the text" and while answering proper questions knows how to again and again bring the class back to the task of the hour.

The Art of Questioning

A well-known educator has said that "*the success and efficiency of our teaching depend more on the skill and judgment with which we put questions than on any other single method used in theoretical teaching.*"

It is possible to be a fluent talker, enthusiastic, happy in the use of illustration—to apparently *deliver* a good lesson, and yet have the pupils really carry very little from the class room of what has been taught, or what we have tried to teach. With a great many of the best teachers, the study of how to use the art of questioning with skill and efficiency is a constant subject of study. Many teachers fail to realize that questioning is both a science and an art. They ask questions, but in a haphazard way which conduces little, if any, to real teaching. They have never studied the science which underlies the art, for though questioning is an art, in that it is a

practical thing, requiring patient practice to become proficient, it is nevertheless based on principles which can be applied anywhere, whether the subject to be taught is history, algebra, astronomy or nursing. It is worth while to spend some time in considering not only the best way to put questions, but the reasons why one way is better than another.

Questions in general may be divided into three classes, according to the uses for which they are intended. One of the generally accepted teaching principles has already been mentioned—that of beginning with what the pupil knows and proceeding to the unknown.

The first class of questions may be called the *experimental* or *preliminary* question, by which the teacher sounds the depths of the pupil's knowledge, reveals, perhaps, some things which he does not know, and prepares for the receiving of the advanced knowledge of the subject. This style of question has been compared to the ploughing of the soil which is to receive the seed. Socrates, one of the greatest of teachers, believed that the great impediment to true knowledge was the possession of fancied or unreal knowledge, and that the first business of a teacher was to prepare the mind of the pupil by showing to him that though he might be quite sure he knew, when it came to actual test his real knowledge of the subject was much less than he imagined.

A good illustration of this sort of question may be found in the lessons on baths in the text-books. Every probationer knows or thinks she knows what a bath is. Probably every member of the class would be ready with an answer to the question, "What is a bath?" They probably are all thinking of the act of cleansing with water, and if asked to write out a definition of a bath the definition would in most cases be confined to this idea of baths. By following up the questions concerning baths

and without the teacher giving out one bit of knowledge, the pupils themselves can very greatly broaden their own definition.

Questions of Instruction.—This illustrates the point that questions of actual instruction are a logical development from experimental questions. Did you ever hear of a bath in which water was not employed? The answers will possibly show that the probationers have heard of sun baths, vapor baths, electric light baths, etc. By the skilful use of questions, they can be made to bring out a great many facts about baths which they really knew, but which needed emphasis and they will get a much clearer impression of the fact that a bath may mean something widely different from the cleansing of the body or a part of the body with water—than would be possible if they were given solely a concisely worded definition of a bath. By this means, also, much misapprehension of a subject may be cleared away, and a foundation of knowledge discovered for further teaching.

It is always well to remember that the average mind refuses to retain isolated knowledge. Facts and principles must somehow be linked with something that is known before, if they are to be retained, hence the experimental question and the question of actual instruction play a large part in successful teaching.

The third class of question in common use is the question of examination, by which the teacher tests the pupil's knowledge of a subject. This kind of question is probably the most freely used, yet there are many things to be learned by study and practice if one is to be skilful in this sort of questioning. Perhaps the most frequent mistake made is in asking questions which simply require "yes" or "no" for an answer. In a certain periodical there appears each month a list of questions on Biblical subjects, in which this mistake finds frequent illustration.

Out of a list of twenty-six questions one month the author checked off twenty-two which could be answered either by "yes" or "no" and called the editor's attention to them. He admitted that he had never before thought of this as a serious defect in questions, though he could readily see that it was. This is one kind of question to be avoided, especially in teaching nurses. Use questions which will stimulate the pupil to thinking for himself instead of cultivating mere memory work, though memory work is not to be omitted.

The arrangement, as well as the language of questions needs to be studied. The questions on a given subject should be arranged in some sort of systematic order, each one growing out of some question that preceded it, or following it in logical order. Random, unconnected questions accomplish little in teaching. It has been aptly stated that "*whatever is learned confusedly is remembered confusedly, and that all effective teaching must be characterized by system and continuity.*"

"Test your questions. Are they clear? Are they concise? Are they comprehensive? Do they lead logically from the simple aspects of the lesson to the more complex aspects? Do the questions as a series, cover the vital points in the lesson? Does each question help all the others? You will not master the teaching process until you have learned how to put your own processes to the test."

Questions To Be Avoided.—There are certain kinds of questions to be avoided in all teaching—for instance, the elliptic question as "The normal temperature of an adult is"—Another form to be avoided is the suggestive form as—"Strychnine is a valuable heart stimulant isn't it?"

The categorical question that can be answered by yes or no has already been mentioned as one to be avoided

by the teacher who wishes to keep up an active interest in class.

A point to remember is that the pupil should not know when she is to be questioned. In other words the successful teacher will rarely if ever begin asking questions at one end of the class and continue the questions in the order in which the pupils are sitting. The question should be asked before the pupil's name is called. If the teacher says: "Miss Jones will you please tell us how you would take a baby's temperature?" the attention of the class will relax as soon as Miss Jones' name is called, and they fail to apply the question to themselves. If the teacher had said, "Will you please tell us how a baby's temperature should be taken, Miss Jones," each pupil would take in the full force of the question, not knowing but she would be called to answer.

The model question has been described as follows in an educational journal: If questions are simple, terse, clear, direct, definite, adapted to the lesson and pupils; if they show practical common sense and tend to quicken interest they are model questions.

The Art of Expression.—It is a matter open for discussion whether we clearly know or understand a thing if we cannot express what we know. Every lesson period should tend not only to show what the pupil knows, but should tend toward correct methods of expression.

It is somewhat startling and disconcerting to find a senior class, as the writer did not long ago, not one of whom could properly and definitely answer simple questions such as "What is a solution?" "What are medicines?" "When you speak of temperature what do you mean?" "What is fever?" "What is food?" and so on.

If the pupils can be taught to ask themselves a few direct questions at the very beginning of their study of every lesson, it will be a great help to them in getting a

grasp of important facts connected with the lesson. The questions what, where, how and why, can be applied to the study of practically every lesson and reapplied all through it, whether that lesson is about drugs, baths, diseases, foods or anatomy or a great variety of other subjects. What is typhoid fever? Where is the seat of the disease? How does it manifest itself? Why does it exist? the answering of those four questions is a good start toward the study of the lesson on typhoid fever.

Again. What is strychnine? Where do we get it? Why is it used? How is it administered? How does it act?

Applying the Lesson.—In a hospital school there is abundant opportunity of applying the questions to concrete cases, and the teacher who fails to do this fails to use his very best opportunities for teaching. The lesson on wounds and their methods of healing may be a very dry uninteresting lesson. It can be made just the opposite if the teacher before going to the class will find out or think over the present or recent cases that have been in the house, and jot down a few names of patients as illustrations.

The class may be able to glibly describe "healing by granulation," without having ever recognized this method of healing actually going on in the ward. If after the question "What is meant by healing by granulation" has been asked, the teacher asks, "Have any of you noticed any cases in the wards at the present time in which wounds are healing in this way?" the conception of healing by granulation at once becomes clearer.

The manner of the teacher who is putting the questions will have much to do with the interest displayed in the lesson. Prompt questions, clear cut, free from ambiguity, delivered with animation, will challenge the attention of the most inattentive, where slow, dull, ill-digested

questions will weary the brightest. If we expect our pupils to be warmly interested in the subject we are trying to teach, we ourselves must be warmly interested and enthusiastic.

It need hardly be stated that it requires considerable knowledge of a subject to enable us ask intelligent questions, stimulating, worth while questions. "We cannot give more than we ourselves possess; we cannot expect to raise the minds of others above the level of our own." We cannot expect carefully studied lessons from nurses, if we ourselves are unwilling or unable to spend time in preparing to teach it in the most effective manner.

We should know before we go before a class how we are going to begin to teach the lesson for the day and the main points to be emphasized. We can depend on "inspiration" for a certain amount of illustrative material and for much that we may use in elaborating on the text, but we should have before us a fairly clear outline of the knowledge we expect our pupils to acquire in the class session. We should know where we are going to put the emphasis in this lesson and why, and how we are going to close. We should have looked ahead to the next lesson and should be ready to suggest phases of it for special study and consideration. All this is possible. We admit that in the rush of hospital life to find time to think how to teach is not always easy. It is often very difficult. Yet the best nurse teachers do find time for preparation. Skill in teaching is not developed by chance.

FOR DISCUSSION

Mention the principal methods of teaching which may be used to advantage in a training school.

What methods of conducting a recitation do you use?

What is embraced in the proper assignment of a lesson?

Show the value of teaching by questions as far as possible.

What ways of calling on pupils are to be studied. Which way seems best and why?

Mention several kinds of questions to be avoided.

Give a definition of a model question.

What amount of time should an instructor of nurses allow herself for preparing a lesson from a text-book on practical nursing which she has taught some months previously, to another class.

How may a teacher help pupils to acquire the art of expressing in choice well arranged form, their answers?

CHAPTER VIII

Some Principles and Methods of Teaching (*continued*)

One of the secrets of successful teaching of nurses or of any other class of students, is *repetition.* There is so much in hospital life to distract and confuse, that few lessons are learned by "*once telling.*" We start out with high ideals. We are determined to have obedience, believing, as we do, that obedience is one of the cardinal virtues in a nurse. We will show a probationer *once* how to do this or that, and we will expect her ever after to do it exactly as we showed her. We will tell a pupil nurse *once* that she must do this, and must not do that, and in the beginning we are foolish enough to think she will do as we wish, as a result of having told her *once.* We only need a few weeks' or months' responsibility as a supervisor or teacher to convince us that human beings, nurses especially, are not trained quite so easily as we imagined. Some of them may occasionally remember a thing because we told them *once,* but most of them will not. We may even, at first, inwardly resolve that the probationer or nurse who doesn't do as she is told, after being told once, will be dismissed—that *disobedience is one of the things that cannot be tolerated.*

But, as we grow in experience we also grow in patience —wisdom, too, as a rule. We realize that we might have probationers going and coming all the time, if we carried out our ideal of "*once telling.*" And we have no guarantee that the girl from Kelly's Junction, whose application we have, is any more likely to obey or learn after once telling than the girl who is now on probation and has disappointed us. So by experience and by degrees, we come to the place which other educators have long since

reached, when they saw and emphasized the necessity of repetition in the teaching and training process.

Clearness.—Another lesson learned after a while is that the pupil is not always to blame because she did not retain the thing we tried to teach her. We find out, quite frequently, if we study our methods and try to improve them, that we ourselves, clever as we are, did not make the point quite clear, and we did not properly emphasize it. A little time spent in teaching not only how a thing must be done, *but why it must be done in that way and not some other way, is usually time well spent.* We often fail to make the impression because we did not properly emphasize the importance of the method or principle we were trying to teach.

Another point to be remembered is that the lesson must be taught when a pupil's mind is not distracted by things foreign to the subject. He must be primarily interested in the thing we are trying to teach him or the chances are that he will forget it very quickly.

The state of the body also has a good deal to do with our ability to fix things in the memory. Fatigue renders all of our minds sluggish and we often expect more from pupils than we should, when we try to teach after a hard day's work. There are certain lessons which we may wisely review frequently all through a nurse's course—the precautions to be used in giving medicines is one illustration of the need of repetition. Every nurse is supposed to be taught those precautions before she is allowed to give medicines, yet the frequent mistakes that occur show clearly that though nurses may have been taught this lesson they have not really learned it. It is the business of teachers to see that what they have tried to teach has been actually learned for teaching is not merely telling—it is causing another to know and remember.

The free use of drawings and charts—teaching through the eye as well as the ear is always a great aid in fixing a point in the pupil's mind.

The review should be an important part of our teaching methods. Its object is not a stuffing or cramming of the material studied. It should rather be a test of thoroughness. It should result in connecting and fixing permanently in the mind the material we have been studying. It is well, therefore, in preparing our schedules to allow time for reviews at least each three months, and still better to plan our class work so that at each lesson period, we can spend a few minutes at the beginning in reviewing the important points in the previous lesson. A wise and successful teacher once said that if his class periods were one hour he would spend at least ten minutes in the beginning in reviewing the previous lesson and ten minutes at the close in going over with the class the lesson assigned for the coming week. The written monthly review does much to make the final examinations less formidable.

Answers.—How many nurse teachers who ask questions are able themselves to analyze a good answer and tell what its elements are? Yet this question of what constitutes a good answer is one that is well worthy of study and discussion. One of the common failings of nurses is to either fail to read the question carefully or to wander far from the question in their answers. They tell a lot of things not asked, but neglect to answer the thing that is asked. An important part of the early teaching of nurses should be the method to be used in answering questions in general; and perhaps more needed is definite instruction in *how not to answer* questions.

The reason why many nurses fail to properly answer questions is because they do not take time to properly read and grasp the question. They may perhaps be

asked to outline the nursing management of a particular case or condition. Instead of telling the practical things which should be done and the points to be guarded, they launch out into a description of the symptoms and the complications and the surgical treatment necessary when a certain complication does occur. Or perhaps they are asked how they would prepare the patient for a normal labor, and devote most of their answer to telling how they would get the room and bed ready, etc. Such blunders would not occur so frequently if the elements of a good answer and *what not to do* when answering questions, were properly taught to pupils and repeated till every pupil had really grasped the points which make the difference between a good and a poor answer. One of the best ways to do this is to take the papers or some typical questions after a written review or examination, and show the defects in the answers.

The preparation of short papers on nursing subjects at frequent intervals during the training period is a great help to habits of study, as well as to clearness of expression.

The following hints on how to prepare a paper may be helpful in getting nurses started in such work.

1. First think your subject through carefully and decide the main points you think should be touched on.

2. Write those out in the order in which you intend to treat them.

3. Make a skeleton, something on this order.

Title—Surgical asepsis.
Theme—Methods of securing it.
Introduction—The Germ Theory.
Development—Steps toward asepsis.
Points to avoid—
Conclusion—

The introduction should be comparatively short. The

main part of the paper should be given to the development of the subject. The conclusion should usually be either a climax of ideas in the order of their importance or a general summing-up of the main points of the paper.

Write first a rough copy. Then let it rest a day or two or longer, and go through it and correct it before rewriting it. Criticize it ruthlessly. Notice spelling and punctuation. Arrange your paragraphs carefully. Short, disjointed paragraphs are to be avoided, so also are too long paragraphs. As a general rule, each paragraph deals with a different aspect of the subject. Study to express yourself clearly. Avoid long sentences. Short sentences are clearer, more emphatic, less apt to be ambiguous. Aim to make each paper better than the last. Give most emphasis to important points. Study the little details which combine to make perfection. It is not sufficient to know all about a subject unless you can express clearly and in proper order what you know. When asked to write a paper, essay, or thesis, always keep it on separate paper from the main part of the examination. In the finished paper the divisions of the skeleton should not appear, but the paper should bear analysis according to these rules.

FOR DISCUSSION AND REVIEW

Why is repetition an important feature in teaching?

What is the difference between telling and teaching?

Show why the pupil is not always to blame for not grasping at once the thought we are trying to convey.

What are some common causes of failure in methods of teaching in a school of nursing?

Of what value is the review in our teaching methods?

What are the elements of a good answer?

Mention some frequent causes for failure to answer correctly, when the pupil really knew the answer.

CHAPTER IX

Teaching in the Junior Year

The important points to be aimed at in the junior year may be broadly classified as follows:

1. Instruction in correct methods of nursing practice.

2. The cultivation in nurses of a right mental attitude toward their work—the development of a right spirit.

3. Instruction in the fundamental branches of science which are allied to nursing practice, and which the nurse needs as a proper foundation for the understanding of much that she will later have to do, if efficient service to the sick is rendered.

The early months of the junior year are by far the most important in the nursing course. In these months, habits of thinking and practice are established. Whether these habits are good or bad, depends very greatly on the character of the instruction given, and on the example of the head nurses and more advanced pupils.

The needs of the nurse herself in this period need to be closely and sympathetically studied. The first few months in a school are months in which an entire mental readjustment of the pupil must be made. She is living and working in a new world, facing new situations, new tasks, and problems such as her imagination had never before led her to expect. It is quite possible to expect too much of her in this period of readjustment.

Teaching by Demonstration.—In previous chapters, emphasis has been laid on the necessity of demonstrating correct methods of nursing practice, and of agreement between the superintendent or principal and the head

nurses who will have the direct supervision of the pupils' work in the wards, as to the methods which are to be taught and used. This agreement as to methods is an absolute essential to exactness, thoroughness, and uniformity. It does not mean that there is not more than one way of doing a thing that will give the desired results. It does mean that no school has time to teach *all* the ways of doing every nursing duty, but that it has assumed the responsibility of teaching nurses *one correct method*, and that "slap-dash," haphazard ways of doing nursing duties will not be tolerated.

The Demonstrator.—Where the school has no resident instructor to assume the main responsibility for classroom work, the task of demonstrating is usually assumed in a small school by the superintendent assisted by a senior nurse, who while being taught what to get ready for the demonstration, is also receiving a valuable practical lesson herself. In larger schools, the list of demonstrations to be given is often divided among the graduate head nurses. In any case, it is important for the pupil herself to keep a record of the methods she has been taught. If this is not done, it is extremely likely in a school of any considerable size that some pupil will pass through the school and graduate without having been taught some important procedure which she had ample opportunity for learning, but the matter was overlooked. See page 188.

The use of "dummies" for demonstration purposes is both condemned and approved. Some very good teachers contend that it is not fair to pupils to demonstrate on a dummy which can show no symptoms, has no small or delicate parts, and which is incapable of motion or response. Without doubt the teaching on "dummies" can be carried too far, but there is no question of the convenience and value of the model or doll for teaching

many of the first lessons. The lack of an "adult doll" with or without its several reservoirs—so useful in classroom work—need not handicap the demonstrator who is willing to take a little trouble to manufacture her own models for demonstrations. Some very good substitutes for the expensive article have been evolved by nurse superintendents. (See Figs. 2 and 3.)

Teaching Hygiene and Bacteriology.—In the whole field of nursing education there is probably no subject which has been so imperfectly taught as the subject of hygiene—the science of health. It was the one subject on which Florence Nightingale fifty years ago laid special emphasis. Yet, to-day, pupils are graduating from schools without having really learned some of the lessons she tried to teach in that far off period. They perhaps are able *to pass examinations on the subject* after some "cramming," but they fail in the application of hygienic principles to every-day life problems.

Perhaps the first lesson to be taught to nurses is that hygiene is not simply a science or a mass of facts or theories to be studied in order to pass an examination but an art to be practised every hour of the day. How to apply the principles of hygiene to the important subject of safeguarding her own health is essential instruction at the very outset of her nursing course. Without it she is a source of danger in the wards. She must first get into her "inner consciousness" the thought that she is constantly exposed to infection, and that if she is to live and move and have her being in close contact with diseased human subjects, she must get rid of superstitious notions about how diseases are "caught." She must learn the one big outstanding fact most necessary for her in the beginning—that infection occurs chiefly by contact. She must learn to refrain from handling infected articles with her fingers. She must grasp and

FIG. 2.—Adult and infant doll used for nurses' practical class work. The Frederick Ferris Thompson Hospital, Canandaigua, N. Y.

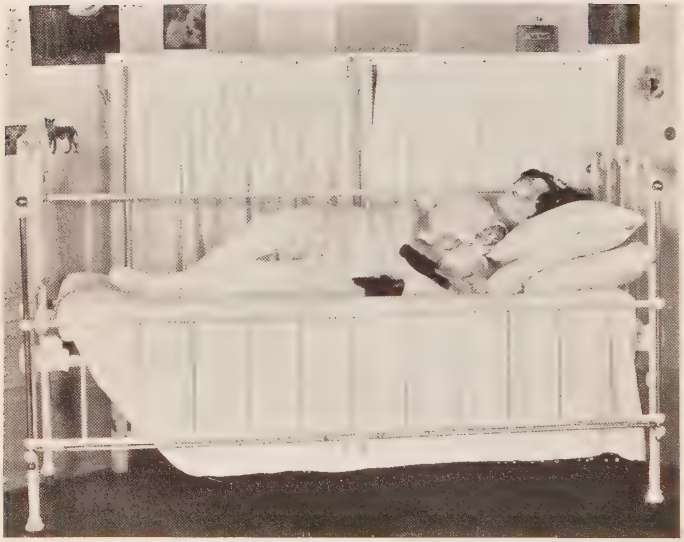

Fig. 3.—Adult and infant doll used for nurses' practical class work. The Frederick Ferris Thompson Hospital, Canandaigua, N. Y. Dolls used for nurses' practical class work were made by taking undergarments, shirt and drawers, and filling them with cotton batting (and sandbags to make the necessary weight), stockings were treated in the same way for lower extremities, and cotton gloves for hands, filled with cotton. Over the whole body was fitted a strong muslin cover, on which was applied four coats of shellac; an ordinary mask, also shellacked, covers the face, and a real hair wig completes the head. Every joint is flexible; hands covered with rubber gloves.

This doll has been used for bed changing, lifting and placing in all positions, has had hot and cold packs and baths, poultices and plasters for about one year, and has stood the wear and tear exceedingly well.

act on the simple prosaic fact that on the way she uses her hands, her method of washing them and the general care of them, her safety and the safety of her patients will very largely depend. She will probably be loath to believe this. She will carry into the school the common ideas that prevail among the laity, that there is a great mystery about the way diseases are contracted—that in order to avoid infection, some curious and elaborate course of procedure is necessary, and in order to help her get rid of this impression as soon as possible, such methods must be used as will make a strong and vivid impression on her mind.

The subjects bacteriology and hygiene are so interwoven, that they cannot easily be separated in the beginning. Bacteriology teaches the reason why certain things are done, hygiene has to do chiefly with the application of the theories which are taught. There is no general agreement as to how much nurses should be taught on these subjects, and the methods of teaching must depend to some extent on the laboratory facilities of the hospital, or the facilities which can be secured without great effort.

The methods used in the beginning will depend largely on the teacher. Whether a nurse or a physician or a trained pathologist should teach these subjects may wisely be left to the future to settle. As a matter of fact, all three may wisely be utilized as teachers at different stages. A nurse as a rule makes the best teacher for the beginners. She probably has not forgotten how unnecessarily difficult the subject of bacteriology was made for her years ago, when practically all the instruction was given by means of lectures by doctors, how puzzled she was over many of the new and difficult terms used, and because of this experience she will usually be able to give the preparatory instruction better than anyone else.

The teaching of these subjects in the junior year naturally falls into three divisions.

1. The practical teaching regarding how diseases are transmitted, the dangers to be guarded against, and the methods to be used. This instruction comes naturally in the province of the nurse and is interwoven with every-day practice.

2. Theoretical instruction from text-books, supplemented by lectures, and illustrated by charts, drawings, etc.

3. Laboratory instruction preferably given by the hospital pathologist or by a staff physician who has specialized to some extent in bacteriology.

Acting on the principle that it is always wise, when possible, to begin with facts which the class know or have observed, and proceed in natural order to the unknown facts which it is desired they should grasp, such a preliminary talk might begin by a discussion of dust. Every pupil has observed the tiny floating particles of dust that show so plainly when a ray of light streams in through an opening in the shutter. They may not have considered that the air is always thoroughly mingled with these floating particles, though the particles are not always visible. The constituents of dust, the difference between the composition of the dust in the ordinary house and the hospital; the necessity of removing this dust, as far as possible and of preventing it settling on wounds, dressing materials, or becoming mingled with foods; the reason for damp dusting, the soil and conditions necessary for the development of disease-producing bacteria; the functions of the good germs—these facts can all be presented in a way that will be clear, and as fascinating as a story, if the lecturer knows how to clothe facts in interesting story form.

A second talk on the subject might be devoted to the

common house-fly, the part it plays in carrying disease germs, and the possibilities that exist for pet dogs and cats to become carriers of infection.

Simple laboratory demonstrations at this stage help to drive home the teaching as will no other method. Let the pupils examine, under the microscope, the dust from an ordinary ward and the scrapings from beneath the nails. Let them observe a fly caught in the wards, and examine it under the microscope. When teaching a pupil the necessity of thorough scrubbing of her hands, let a culture be taken of the dirt from her finger nails before scrubbing, during the process, and after, and the necessity of careful cleansing and thorough scrubbing takes on a new significance.

The hygiene of digestion needs a good deal of emphasis in the junior year.

If the hygiene of the digestive system received more attention in the class room it might help to correct some most unhygienic practices which are now notoriously common in hospitals. An English magazine, in commenting on one of these practices, says: "It is curious and not very creditable to the heads of institutions, that although it has now long been acknowledged that leisurely mastication is the first essential to digestion, meals are nowhere scrambled through with more indecent haste than in establishments dedicated to the cure of disease. The top speed necessary to satisfy the appetite in many hospitals is a standing menace to health. And the very complaints which the institution exists to cure may be observed in process of manufacture among the staff."

Not only is the dinner hour often reduced to twenty minutes by unpunctuality or indifferent service, but some nurses have boasted that they could get through a dinner in ten minutes—when they were allowed or expected to take a half hour. The best that can be done under the

circumstances is to drink the food, for eating, which implies mastication demands that time be given to it.

Surely quite as important as any other lesson which nurses receive, should be one that insists that the first essential to maintaining sound health and physical vigor is to "treat their digestive organs with respect."[1]

Oral Hygiene.—The important part played by mouth infections in causing disease and the need of proper care of the teeth, can hardly be too early or too greatly emphasized in teaching junior nurses.

If the study of bacteriology is divided—giving elementary instruction during probation and early in the junior year, and the advanced teaching later in the course preferably during the second year, much better results will be obtained. The student gets the advanced class work at a time when its value can be measured because of experience gained. The real value of this instruction will be determined by the extent to which the facts taught and the knowledge acquired is tied up to the every-day life of the individual, to the actual ward work, and to the work in a community for which nurses are responsible.

The social significance of health instruction and how to apply it in an average community is a part of the subject which may be woven in with the teaching in each year of training.

Anatomy and physiology may be taught in such a way that they are as dry and stale and uninteresting as any subject can be. Given a teacher who knows how to collect and to utilize illustrative material that is easily available without great expense—the dry bones can be made to live in the class—the study can be made fascinating.

[1] The Hospital.

The extent of instruction in these branches required in the ideal training of a nurse is a much-disputed question. In order properly to care for the disordered human machine, how much does a nurse need to know concerning the structure of its different parts, their relations and functions? Certainly a thorough education in these branches of science is unnecessary, and impossible before graduation, if other subjects be granted their rightful place in the curriculum. A nurse cannot know too much about the machine, the disorders of which are to furnish the demand for her services, but she can do good, practical work without going into the minutest details of the subject.

This study is regarded as one of the foundation sciences in a nursing education, therefore the major part of the work in it must be done in the early part of the course. Just at that period in a nurse's course there is need that she get instruction on a number of other subjects if she is to be a trustworthy and intelligent nurse. The number of hours spent in class-room work is much less important than the quality and method of teaching.

Teach the Broad Outlines of any Subject First.—This rule if kept in mind will save pupils many weary discouraging hours in the study of anatomy and physiology. Get first a clear knowledge of the skeleton as a framework without any effort to learn the names of the bones at this time. Let the idea be grasped that these bones are bound together by ligaments; next that they are moved by muscles. Then show that the life of the body is dependent on certain systems—vascular, nervous, muscular, etc. Let the thought of the human body as a whole be grasped, and its general structure understood, and the facts about the minute anatomy of tissue which a nurse needs to know will be decidedly easier of comprehension.

In studying the systems of the body it seems best always to begin with the bony system, the framework which supports and protects the softer structures. The muscular system naturally follows next. The order in which the other chief systems of the body shall be taught is a matter of choice. The following arrangement seems as good as any:

1. The osseous or bony system.
2. The muscular system.
3. The nervous system.
4. The circulatory system.
5. The respiratory system.
6. The digestive system.
7. The absorptive system.
8. The excretory system.
9. The reproductive system.

Cavities and Contents.—Then the study of the organs of the thorax and abdomen, their relative position and functions, might follow, and then the process of waste and repair, the chemistry of the body and the cell be taken up. If a nurse got no more of anatomy and physiology than this study of the systems, taught in an elementary manner, she would have a fair working knowledge of the subject. And this is as much perhaps as it is desirable to try to put into the first year, if due proportion in time for the different studies is to be maintained.

In the second year, lectures on diseases are usually arranged, and it is a distinct advantage in studying the diseases of various organs, to have as a preface, the study of the anatomy and physiology of the part. Practically every lecturer in gynecology and obstetrics begins the course with a study of the female pelvis and generative organs, their functions and their relative positions. Practically every lecturer on diseases of the eye begins

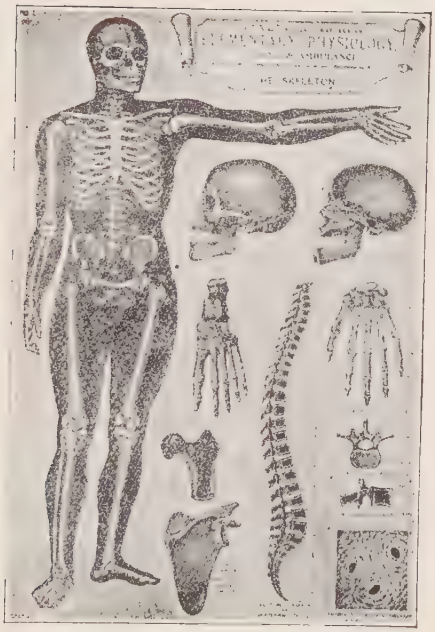

FIG. 4.—The skeleton.

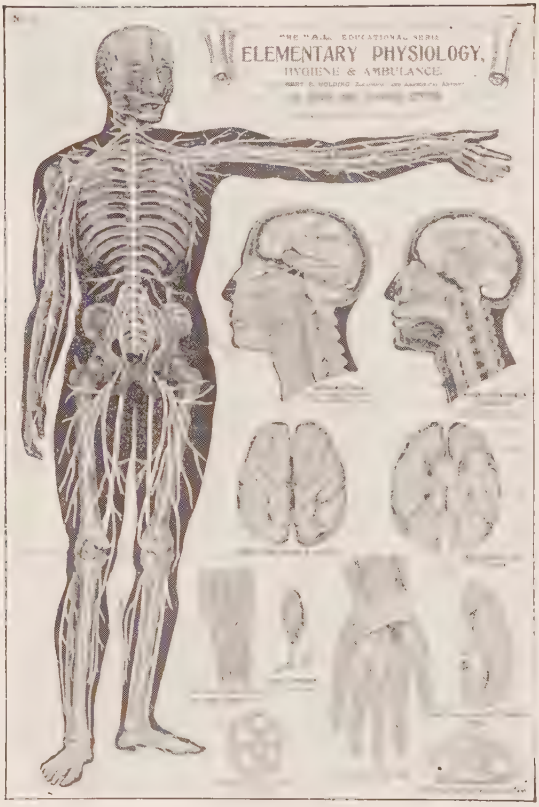

Fig. 5.—The brain and nervous system.

with the study of the eye in health. The same rule applies to the study of nervous diseases, diseases of the digestive system, the respiratory and other systems. By arranging for this to be done, the cramming that must result if an attempt is made to crowd the whole subject into the first year is prevented, the nurse gets the broad outline of the subject as a foundation-stone at the beginning, and the more detailed study of the organs in connection with diseases comes at a time when she is better able to digest it.

In the real teaching of anatomy the best results will follow if lecture and text-book are combined. To depend on the lecture method alone is folly, and it will be found that the student cannot do good work if dependent on the text-book alone. Salient points need to be emphasized and difficult points explained. The whole subject needs to be illuminated from the experience of the teacher.

Illustrative Material.—Anything that can be used by way of demonstration, helps to hold the interest and fix what is taught. A well-illustrated text-book is invaluable especially in the early months of the course. Pupils will learn much from pictures that they will learn in no other way. Manikins and anatomical charts which show the shape, size and location of organs, are almost a practical necessity for clear teaching. Wet specimens of various parts can often be obtained from college collections. From the operating room there can, from time to time, be secured pieces of bone, tissue, or organs which illustrate normal and pathological conditions. These are, as a rule, more valuable in the second year, than in the first year of training. The structure, position, and function, of an ovary and tube can certainly be made clearer by showing the structure as seen in operating room specimens, than by hours of lecturing.

The same is true of many other of the hidden portions of the body of which specimens may be obtained. A skeleton is a valuable part of teaching equipment when wisely used by the teacher. An autopsy when it can be arranged for will make many points clearer if the demonstrator knows how, and has time to utilize the teaching opportunity.

How not to Teach Anatomy.—The results of the old method of teaching in which the doctor lectured, using his Gray's anatomy as a foundation, and the nurses took notes of the lectures, later to be copied and studied is illustrated by the notes of the following lecture taken by one of the brightest nurses in a school of which the author was in charge:

"Anatomy—Cranium, complicated affair, contains brains embryo. Neural canal 1 in. in length, epiglastic membrane on either side. Rolls upon itself, dome of head is composed of membraneous tissue, also cartilage. Sephalic skull proper; vault by membrane base—cartil—Indian triangular dark skin globular skull has four centers and panetal—outer and inner—softer—harder separated by one-quarter inch cellular tissue. Tetal skull—at junction sagital—fontanelle anterior and posterior—oval and long—open to years. R. F. closes sixth week new-born babe—pulse in anterior font—nucleus center of bone. Skull protection—ear to middle of head one-half inch back of—middle fissure of sylvius muddle inguinal artery.

"Legs, arms, face, heart, lowest middle inversely to parts they supply. Brain seldom injured by external—fracture at base—1 inch cebal fluid brain float—circulation of brain and skull, 2 vertebræ unite divide into poster. cerebral arteries either side of brain. Circle of Willis. Blood-vessels pass off dead portion of brain.

"Two centers for sight in cerebrum. Nerve-fibers

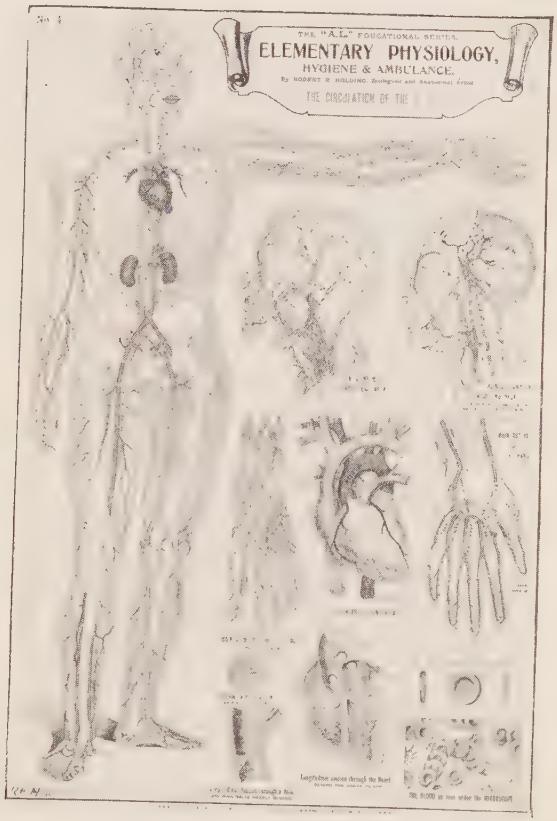
THE "A.L." EDUCATIONAL SERIES.
ELEMENTARY PHYSIOLOGY,
HYGIENE & AMBULANCE.
By ROBERT B. HOLDING, Zoological and Anatomical Artist.
THE CIRCULATION OF THE

FIG. 6.—Circulation of the blood.

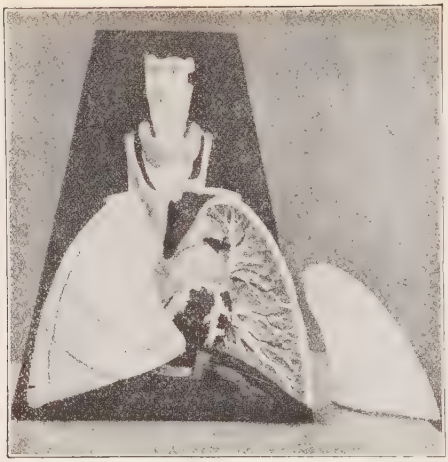

Fig. 7.—The lungs.

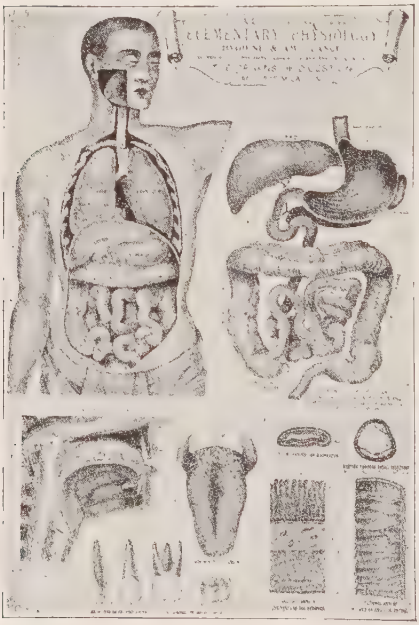

Fig. 8.—The organs of digestion.

pass to each eye, right to left, left to right. Individual—both—or all to one eye."

Is it an extreme illustration? Examination of nurses' note books in hundreds of hospitals ten or twelve years ago, would have revealed similar conditions. It is well for those who still adhere to teaching anatomy by lectures to investigate, and make sure that they are not perpetuating methods which should have long since be left behind. No real foundation for a nursing education can be secured by such teaching.

FOR DISCUSSION

Outline the important points to be aimed at in teaching in the junior year.

Make a list of the equipment necessary or desirable for a good demonstration room in a training school, and estimate the cost of such equipment.

Discuss the advantages and disadvantages of instruction on models or dolls.

Describe the best methods of teaching bacteriology to probationers.

Mention some important practical health instructions which probationers should have as early as possible in their course.

Discuss the value of laboratory instruction in bacteriology for junior nurses and the extent to which it is useful to provide for it.

Outline a practical talk on personal hygiene for junior nurses at the beginning of their training mentioning points which need special emphasis.

Mention some practical examples of unhygienic practice which you have observed among nurses in your school.

Give some general principles which should be observed in teaching anatomy and physiology.

Discuss ways and means of securing illustrative material for use in anatomy and physiology classes.

CHAPTER X

Teaching in the Junior Year (*continued*)

The primary meaning of the word "nurse" was to nourish, and the question of suitable nourishment will always be important to the nurse and to the patient. In the final analysis we are much more dependent on the kitchen than on the drug room for good nursing results.

While progress is being made in both the teaching of dietetics and in the practical management of the feeding of the hospital family, it is still true that one of the weakest points in the whole machinery of hospitals in general has been and still is the dietetic department. Physicians have found and still find it impossible to secure for patients the special diet the conditions demand. Patients complain of food, of the way in which it is served and of the lack of delicacies or really appetizing variety. Friends of patients still patiently or impatiently carry, day after day to many modern hospitals, delicacies for private patients who could not relish the food provided, delicacies that the hospitals should provide. It is manifestly impossible to please everybody, but in the great majority of instances there is reason for complaint. The picture drawn some years ago by Mrs. Richards in her papers on "Hospital Dietaries" is still altogether too realistic to form pleasant reading for those who carry hospital responsibility. "I have seen," said she, "a delicate girl with a very sensitive stomach served with a tray full of meat, mashed potato, squash, gravy, and sour bread—all cold—in quantity sufficient for a trench-

digger. I have seen going out from the hands of a teacher of nurses in a diet-kitchen soggy Lyonnaise potatoes, lemon-pie with a soaked under crust, and burned toast—all on one tray. I have known of mince-pie being offered to a patient still in bed with pneumonia. In fact, I do not know of a hospital in the country from which I could not bring similar instances. If the cooking is good, the serving is bad; every evidence of total lack of appreciation of the office of food, of the best means for securing the fulfilment of that office; lack of coöperation of all departments toward this end."

That the kitchen is, or should be, a scientific laboratory from which is to be supplied the substances needed to repair the waste of tissue, to renew strength to assist the body in resisting the inroads of disease is one of the important lessons to be taught to every nurse early in her course.

She must be taught to reconstruct her ideas of a kitchen as a place in which necessary but menial labor is performed, to regard food as one of the most valuable remedial agents that exists, and careful feeding as one of the most important duties she will have to perform.

In the smaller hospital where often no trained dietetian is employed the matter of giving a good course in dietetics is sometimes a real problem. It is however, being successfully handled in various places and in various ways.

The theoretical teaching of the subject can be handled by the principal herself or by a head nurse or physician who is keenly interested in the matter of dietetics from a therapeutic standpoint. For the practical instruction sometimes a teacher can be secured from the public schools, sometimes from the Y. W. C. A. Sometimes a visiting dietetian from a neighboring hospital can be secured. Sometimes a head nurse can be spared to

spend a few weeks in the dietetic department of a well-organized, well-equipped hospital or sanitarium to observe teaching methods, and assist in the practical teaching which the nurses are receiving—later to return to apply the knowledge and experience gained in the hospital employing her. Just as soon as superintendents of hospitals and training schools and boards of managers realize their responsibility and their shortcomings in this respect, and work together to bring about a better state of affairs, a way will be found to make the needed improvements.

Preparatory Lessons.—The process of digestion and of tissue building are largely chemical processes, which will be much better understood if a series of chemical experiments are used as preparatory lessons before the actual teaching of the theory of dietetics begins. No elaborate outfit is needed for these experiments. Any hospital has practically everything needed to demonstrate the subject of combustion, the effect of heat on various substances, the action of acids on metals, the results of exposing bread or cheese to the air and keeping it moist; and the tests for starch, albumen, etc. The chemistry of cleanliness might wisely form the subject for one of these preparatory lessons.

How much should a nurse know about foods? How much time should be allotted to it? Considering the multiplicity of important things that are clamoring for a nurse's attention during her first year, how much about foods is it desirable to try to put in the first year studies? If she gets a clear understanding of the main principles of nutrition, of different classes of diets, and practical instruction and experience in the methods of preparation of foods suitable for invalids, it is perhaps all that she can reasonably be expected to manage in the study of dietetics in her junior year, if she does justice to

FIG. 9.—Diet kitchen instruction for probationers in Hospital for Sick Children, Toronto, Ontario. A lesson on preparation of eggnog and omelettes. ("Trained Nurse and Hospital Review.")

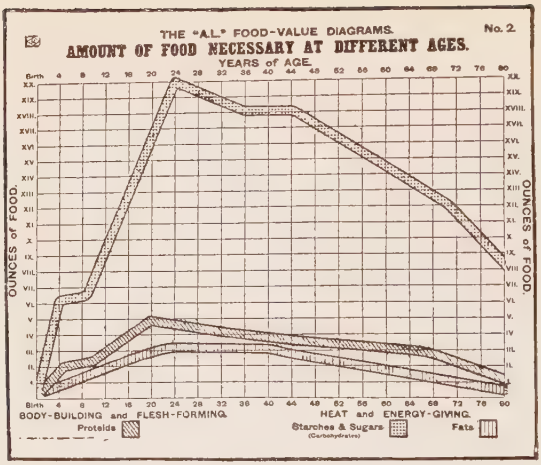

FIG. 10.—The "A. L." food-value diagrams. Amount of food necessary at different ages.

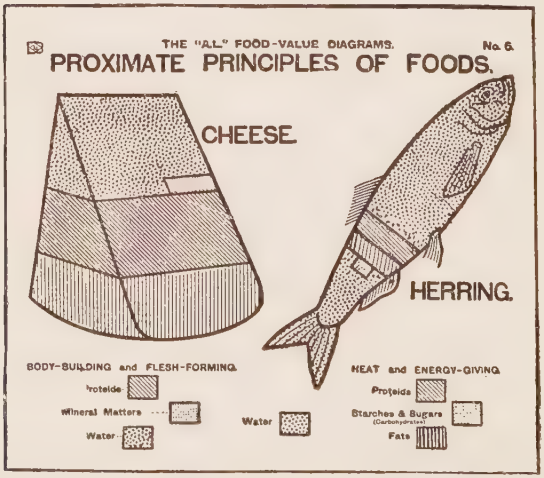

FIG. 11. The "A. L." food-value diagrams. Proximate principles of foods.

other branches of nursing studies that are equally important for successful work.

Even an elementary study of the principles of nutrition would include the chemic composition of the body and of food, the sources from which food is obtained, the various ways of classifying foods, the uses in diet of water, protein, carbohydrates, fats, and salts. It would also include lists of foods for tissue building and for the production of heat and force. From the knowledge thus obtained the nurse should know how to make up suitable menus for any of the common classes of diets and to give reasons for including and excluding foods from those lists. She should know something definite concerning the food value and the proper methods of preparation of fluid foods and beverages, so that she will not be guilty of the double blunder of making tea of water that was not boiling and calling it "nourishment" in her bedside record.

Milk and Eggs.—She should know how to administer milk in all its varied forms and disguises so that it will be suitable to the taste, and also in the best condition for assimilation. She should know the effect that boiling or pasteurization has upon the digestibility of milk and of the best means of diluting it for weak stomachs. It would take a good deal of time to thoroughly study milk, but she ought to know a good deal about it. The same may be said concerning eggs. A nurse who does not know how to prepare eggs in a variety of ways, and serve them in an attractive manner, and who does not take pains to please both the eye and the palate, is unworthy of the name *nurse.*

In the elementary study of flesh foods the first year, the nurse should know at least the relative digestibility of the different kinds of flesh foods, and how best to cook the foods, so as to get for her patient out of the meat the maximum amount of nourishment with the minimum tax

on the digestive powers. She ought to know how to make and prepare a variety of meat and vegetable soups and purées, and should know the nutritive value of vegetables, as well as how to cook and serve them attractively.

How much should a nurse know about bread? She ought to know the difference in the food value of the white and brown breads, but more important, by far, than that, she should know how to "fix" bread, arrange it for her patient so that the sight of it will make him want it, rather than repel him. By all means she ought to know how to make a respectable piece of toast—one that is not burnt on one side and white on the other, one that is neither dabbed with butter in patches, nor soaking with melted butter.

Besides this, there is a good deal that she should know about desserts—how to make them dainty and attractive looking, as well as how to calculate from the ingredients how much real nourishment her patient is getting from each one.

Balanced Rations.—The tendency of the times is toward a more exact knowledge of food values and food requirements under different conditions. The general public is taking more interest in the subject. Popular magazines have devoted large space in recent years to the subject of balanced rations for all classes of people. A nurse's education should certainly include careful instruction in food values. She should know how to compute a dietary that will supply to an individual the kinds and quantities of food necessary to provide for nutrition, growth, heat and energy but it is entirely possible to overemphasize this phase of the subject. It is easily possible for a nurse to supply a patient with a meal that is calorifically perfect but thoroughly inappetizing, even distasteful to the patient. However nutritious a food

may be it has to be properly prepared and served attractively or the patient will fail to get the benefit from it. She must know how to vary monotony, to change form and color; she must be proficient in how to make the psychic appeal by preparing it so as to please the patient. Unless a food be eaten and assimilated there is double waste.

In the second year the instruction in dietetics may wisely be devoted to a study of foods and feeding in various disease conditions, the results of dietetic errors and the general subject of metabolism as it comes in the province of a nurse. There is as a rule no difficulty in securing illustrative material on this subject. The U. S. Department of Agriculture has done an immense amount of research work on the subject of nutrition, and charts and much other valuable teaching material can be secured from that source.

The practical instruction in the preparation of food is arranged for differently in different institutions. It is generally agreed that this part of the instruction should come as early in the course as it can be arranged for.

In a considerable number of hospitals the instruction is given by a paid teacher who comes to the hospital weekly. In others the dietitian goes from city to city, spending a term of two weeks or a month in a hospital, taking charge of special diets during that time, giving lectures and demonstrations, and instructing the nurses how to conduct such a department. Usually after this course a nurse is placed in charge of the diet-kitchen and gives her time while there to the preparation of special diets and delicacies.

In other institutions a trained dietitian is in charge of the diet-kitchen all the time, and nurses are detailed in turn for diet-kitchen work under her supervision. Whenever possible, it is well to have two nurses on duty in the

diet-kitchen. With two-month terms, if nurses go from the diet work one at a time, it always leaves a senior diet nurse there, who understands ways and means and helps to keep the wheels running smoothly. In one large hospital having a very well-equipped dietetic department in charge of a graduate of a Domestic Science Institute, four nurses are on duty constantly in the diet-kitchen, the terms being two months. With the exception of cereals and bread, the latter of which is bought already baked for the entire household, all food for the private patients is prepared in the diet-kitchen; also formulas for artificial food for infants, beef-juice, beef-tea, gelatin, custards, and semisolid diets, and special diets for ward patients.

The work of the diet-kitchen is divided into four branches, each nurse being two weeks on each line of food. One prepares all meat and vegetables; another, ice-creams, salads, and desserts; another, special ward supplies and infants' food; and the fourth attends to toast, broth, milk, butter, and anything that may be ordered not included in the other three divisions. All gluten bread for diabetic patients is made by the diet nurses.

The food is sent by dumb-waiter to serving kitchens on the different floors. Trays are set by the regular nurses. One nurse goes from the diet-kitchen to each floor and assists in serving it on the plates. The trays are carried to the rooms by the nurses on duty in those rooms. Ice-cream (and all ices) is dished in the diet-kitchen, and served to the patients separately, after the hot food is disposed of.

A plan for beginning practical diet kitchen instruction for probationers, that may be suggestive to the dietitian who for the first time faces a class of beginners in nursing, is as follows:

First Lesson.—Fuels: coal, gas, kerosene, electricity. Air in its relation to fire drafts. Management of a coal range, gas range. Cooking utensils. Care and use. Proper cleaning materials.

Second Lesson.—Tray setting. Practical points in food serving. Things to avoid. Stacking soiled dishes. Necessity for quietness. How noise in handling dishes may be prevented. Dishwashing. Dishcloths and towels. Cleansing, etc.

Third Lesson.—Care of food. Refrigerator. Use of ice. Methods of cooking. Measuring and weighing. Need of accuracy. Hints on how to work, see page 118.

Fourth Lesson.—Beverages: water, tea, coffee, lemonade, Postum cereal, cocoa.

Fifth Lesson.—Barley water. Albumen water. Peptonized milk. Lemon jelly. Flaxseed lemonade. Junket.

Sixth Lesson.—Milk. Methods of administration. Pasteurization. Milk punch. Egg-nog. Albumenized milk. Whey. Koumiss. Ice-cream.

Seventh Lesson.—Eggs: soft-boiled, poached, creamed. Poached egg in milk. Omelet. Baked cup custard. Boiled custard. Scrambled egg on toast.

Eighth Lesson.—Semi-solid foods. Cereals: rice, tapioca, cream of wheat, oatmeal gruel, corn-meal mush, blanc mange. Shredded wheat. Oyster stew.

Ninth Lesson.—Soups. Soup stock. Chicken broth. Beef broth. Consomme. Beef juice. Cream of tomato soup. Puree of potato soup. Vegetable soup. Rice soup. Tomato bouillon.

Tenth Lesson.—Toast: buttered, dry. Cream toast. Milk toast. Scraped beef sandwiches. Egg sandwich. Sandwich fillings for convalescent's lunches.

Eleventh Lesson.—Potatoes: mashed, riced, scalloped, baked, stuffed. Potato souffle. Sweet potatoes. Potato croquettes. Other vegetables in season.

Twelfth Lesson.—Artificial feeding of infants. Care of bottles and utensils. Food substances. Milk modification. Oatmeal water. Malted milk. Condensed milk, etc.

Thirteenth Lesson.—Beef. Cuts. Methods of cooking tender meat: broiling, roasting, boiling, broiling beefsteak by coal fire, by gas fire, pan-broiling, brown gravy.

Fourteenth Lesson.—Vegetables that supply proteids: peas, beans, lentils. Salads. Essentials in making. Preparation of ingredients. Salad dressings.

Hints on How to Work*

"1. See that the fire is ready for use, or so arranged that it will be ready by the time it is needed.

2. Collect all the materials that will be needed.

3. Collect all the dishes, spoons and other utensils that will be needed, including a plate on which to lay sticky spoons, knives, etc.

4. Take care not to make work for yourself by using more utensils than are necessary. For instance, by measuring dry utensils first, then liquids and last fats, you need use only one cup.

5. When milk and eggs are used save a little of the milk to rinse out the bowl in which the eggs are beaten.

6. Have all materials ready for use—flour sifted and measured; eggs broken; raisins stoned, etc., before beginning to put them together.

7. Cover flour-barrel, sugar bucket, baking powder can, etc., as soon as you have taken from them what you need.

8. Clear up as you work, putting dishes to soak as soon as they are emptied, and washing them at once if a moment is to spare.

*From Theory and Practice of Cookery. Williams and Fisher.

9. When finished, collect all the dishes that remain' saving any unused material that is in good condition.

10. Learn to work neatly, carefully, quietly and quickly."

TEACHING MATERIA MEDICA

Few subjects offer greater scope for originality in methods of teaching than does Materia Medica. A good many teachers who have been fairly successful in teaching other subjects have been unqualified failures in teaching this subject. It is safe to say that without a good deal of reading outside of the text-book and considerable effort in collecting and arranging illustrative material, real success will not be reached. Yet when taught by an enthusiastic well-informed teacher few subjects are more interesting.

When a teacher is found who really knows how to inspire his class with enthusiasm and accomplish good results in teaching materia medica he (or she) should be encouraged to specialize on this subject, to continue it from year to year, to keep posted in regard to developments in this particular line, and each year add to his stock of material used for illustrations.

Preparing the Way.—It has been found wise to preface the teaching of materia medica with a series of carefully planned chemical experiments. The hospital pharmacist will as a rule be glad to take charge of these experiments. Occasionally it may be possible to have these demonstrations in chemistry given in the laboratory of a high school or college. But in every hospital drug room there can be found the materials necessary to show the chemical changes that are produced in drugs when combined with other materials, and to give clearer ideas of the action of many of the drugs which nurses are required to handle.

The drug room of the hospital should whenever possible be used for the earlier lessons on materia medica. There the drug under discussion can be easily secured for illustration purposes. There the nurse will most easily gain a practical understanding of the various weights, measures and symbols.

Teaching dosage is never an easy matter. A knowledge of the dosage of drugs comes as a rule by experience in handling them. The human memory is too fallible to depend on it to retain accurate knowledge of the dosage of hundreds of drugs or of any great number unless the fact of correct dosage is woven in with other facts in the experience. The statement that the dose of strychnine is from one-sixtieth to one-fifteenth of a grain makes no great impression on the mind of a pupil unless the teaching goes farther, unless it makes a real appeal to her reasoning faculties. If she does not know any more about strychnine than that statement she is likely to forget quickly that important item of information. So far as she can see the dose might as well have been an ounce or a half pound as a sixtieth of a grain. But describe to her some case in which an overdose of strychnine had been given—the effects produced on spinal cord, nerves and muscles, and the importance of definite correct dosage will be more likely to stick. Let her look up for herself the results of proper dosage and overdosage and she will know and remember, "that to give a therapeutic dose is like hauling a shipwrecked sailor to the cliff top by a rope, and that to give a toxic dose is like throwing him over the cliff. She will grip the fact that upon a knowledge of the right dose not only the life of a sick man may depend, but the life of a man in the dock. Once acquired and realized in the manner stated, facts of this kind remain."

An excellent plan of tying up the teaching of materia

medica with the practical work of the wards is for the principal to go through the wards, making a few notes regarding medicines or drugs that are being used and furnish the teacher of materia medica with a list of drugs which nurses are handling, and ask him to include a few such in each lesson—touching on reason for, and methods of dilution, special effects to be expected, etc.

Acting on the principle of teaching from the known, familiar objects to the unknown, a very successful nurse teacher of materia medica always begins the real study of drugs by assigning for the first lesson four or five household drugs with which every nurse is familiar. For example: ginger, borax, turpentine, soda, iodine, castor oil, etc. The nurses are required to look up some of the important facts about each one; from what source obtained, for what purposes they are used; the results to be expected, and approximate dose.

Two teaching principles are illustrated and two worth while things accomplished by this method. First, the student will "discover" for herself interesting facts about these drugs that she has long handled; and a fact discovered by a student for herself will stick in the memory, when a statement of the same fact made in the class or by some one else will often fail to remain in the memory. Second, the discovered facts are tied up to something in the nurse's previous experience—which is another aid to retention. The facts have a rational setting in her mind because of practical knowledge of their uses.

How Drugs are Made.—It is probably not necessary for a nurse to know how drugs are made, but even a slight description of the processes through which the pill or tablet which a nurse handles has come to be in its present form will often help to relieve the monotony of an otherwise dry lesson, and help to teach proper care of drugs besides.

Securing Material for Illustration.—A visit to a pharmaceutical manufacturing establishment to see how drugs are made will afford illustrative material that will never be forgotten. One learns in the first place how tremendously important is the part played in the care of the sick by the manufacturing chemist. In this age very few of the medicines which the nurse administers are put up at the corner drug store, or in the hospital pharmacy. They come ready-made from the pharmaceutical houses. Does the manufacturing chemist do his work in slap-dash fashion as some nurses carelessly guess at doses of drugs which have been taught should be accurately measured? Follow the processes and see!

Materials from which drugs are made are gathered from the ends of the earth. Every country in the world furnishes some of them and the story of how they are gotten together furnishes fascinating facts that in any other line would be considered romantic. Try to weave a bit of the romance into the class work and see if it is not a real help.

The Tar Barrel has Furnished Quite a Long List of Drugs.—Animal products are constantly being developed in pharmaceutical laboratories. New preparations of mineral drugs are constantly being formulated and prepared.

The crude herbs come, for the most part, in great canvas sacks, and each shipment of such crude drug material is subject to certain tests to ascertain the proportion of the active medicinal ingredient it contains. This process is known as "assaying." It is said that the proportion of the active medicinal ingredient depends to some extent on the amount of sunshine the plant had while growing, the time of the year and even of the day on which it is gathered, the quality of the soil and a variety of other factors.

The age of the crude drug also makes a difference in its effects. For example, in going through a medical laboratory you will probably be told that the bark from which cascara is made must be stored at least two years before it is in condition to begin to manufacture the various preparations which nurses administer—that its best laxative effects cannot be secured from the drug previous to that time. It is said that few, if any drugs are used in greater quantity than this drug in our own country.

Whole shipments of medicinal herbs are often rejected because of lack of the usual medicinal properties. Different lots of such drugs as nux vomica, belladonna, and cinchona often vary widely—one lot sometimes containing almost double the proportion of the alkaloid or other active ingredient. So at the very beginning, before the real process of manufacture commences, the testing must begin.

How does a nurse know—how can she be sure—that the dose of medicine which she is about to give, perhaps in some grave emergency when the issue between life and death is uncertain—how does she know positively that the drug is of definite potency? A dose of aconite or digitalis, or strophanthus, may be so deficient in medicinal properties as to be worthless—it may be potent to the point of great danger. As a matter of fact, she does not know it, the physician who ordered it cannot prove that it is or is not a thing of usefulness, or of serious damage. The druggist who sold the drug to the hospital does not know. How then can one be sure? As a matter of fact the only way by which one can be sure is to know the firm that makes the preparation.

The process by which the potency of the drug is assured differs with various firms and with the drug that is being tested, but in the whole chapter of making

medicines, no part is more interesting than that which deals with the testing and standardization of drugs. A few examples of this process of testing will, if woven into the lesson, not only add greatly to the interest, but will help to impress on a nurse the exquisite care that has been taken, and that should be taken in the handling of drugs on the action of which a human life may depend.

The drug hyoscine hydrobromate which is given perhaps, in 1–100-grain doses—which is so powerful in its hypnotic effects, and which has such a varied action in other ways—which may easily have a most undesirable effect—is as good an example as any, in which to follow the testing process. The leaves of the crude drug—henbane, a plant which is a native of Great Britain, but is grown to some extent in this country, are exposed to the action of alcohol to extract the medicinal ingredients. A test sample of this fluid extract is then thoroughly analyzed by an intricate chemical process, and its active ingredients set free. By dilution, or concentration, this fluid extract is brought to a standard strength, one analysis succeeding another, till every test has been met, and the standard product has been evolved.

The making of the tablet has its beginning in the formula department. When it becomes necessary to replenish the supply of a standard preparation, a request is sent to the formula department to issue a formula card for some definite quantity, for example, one million pills or tablets. The formula card is carefully filled out by a trained trusted employee, who copies the formula word for word, from the standard formula and signs the card.

The accuracy of this work is certified to by a second clerk who signs his name. A process number is given to the card and the same number appears subsequently

upon all labels, cans, trays, boxes or other containers used in making this particular lot of tablets or pills. By this number it is possible, at any time to trace the complete history of each manufacturing operation, including the names of the individuals who have had any part in the process. In every case a record is made on the formula card of the time when it arrives, and when it leaves each department. Mistakes are absolutely avoided by the use of this formula card and the automatic operation of the system of cross-checking to which it is subjected.

When the formula card has been duly prepared it is sent to the drug and chemical department where the various ingredients called for on the card are weighed and assembled by registered pharmacists exclusively. Here the system of cross-checking begins to operate. Each individual having any part to perform in the collection of materials, affixes his signature to the formula card, and the accuracy of his work is vouched for by the signature of a second individual whose duty it is to go carefully over every step in the operation before him. These ingredients with the formula card, are sent to the mass-room of the pill or tablet department, the mixture is treated with the prescribed excipient into a homogeneous mass by powerful machines which are sometimes large and powerful enough to handle several hundred pounds of mass. From this point it passes through the various processes of rolling into cylinders, cutting, moulding, coating, counting, bottling and labelling.

Before bottling the pills or tablets are carefully inspected, and a sample sent to the control department. The formula card must now present the vouchers of all concerned to the effect that every step in the process has been carried out and verified to the letter.

Every ingredient in the manufacture of a pill has been

tested. Those for which chemical tests are not available are tested on animals. On the label of each package there is placed in red ink a finishing number which serves to identify each lot or any bottle from a lot at any future time.

Hypodermic tablets go through quite a different process owing to the necessity of aseptic precautions, and also because such tablets, being used largely in emergencies and critical cases, usually contain very powerful drugs. For this reason greater precautions are taken than for ordinary tablets in weighing and checking.

When trying to impress nurses with the precaution necessary in handling medicines it may be helpful to describe the careful methods used by the manufacturers in trying to teach the lesson *that those who know most about drugs are those who take the greatest precautions.* Carelessness in such matters is fairly sure proof of either ignorance or a recklessness that should unfit one for nursing.

The *processes* by which drugs are tested on animals is as interesting as a fairy tale—too interesting to fail to make use of in brightening up a dry subject; also the methods by which vaccines and serums are produced. Every teacher of materia medica should be familiar with these processes and in a few sentences be able to use them in class to help tie up the lesson in the pupil's memory.

Many manufacturers of pharmaceutical products will be glad to send to the hospital on request—booklets of information showing pictures of processes. At comparatively small expense a training school can secure a picture machine which can be used to project enlarged pictures of post card size on a screen. Such a machine makes it possible for every teacher to collect pictures from many sources for illustrating any kind of lesson. Pictures clipped from magazines, photographs, charts,

etc., can be mounted on filing cards of or near post card size, and there is almost no limit to the number obtainable. The first cost of such a machine is practically the only cost, and apart from class-room instruction, it can be used in the training schools for entertainment, and for imparting general information on a great variety of subjects.

FOR DISCUSSION

In trying to impress probationers with the need and value of diet kitchen practice, mention some points you would be sure to make.

Describe some chemical experiments which are valuable in introducing the course in dietetics.

Which should come first, the practical diet kitchen work or the theoretical instruction in dietetics? Give reasons.

Out line the first three lessons you would give in practical cookery, to probationers, mentioning the points to be emphasized in each lesson, and pointing out the order in which the instruction should proceed.

Discuss the psychic appeal in foods and its value in nursing.

Show how waste of food occurs, and how nurses may prevent it by wise planning, and general management.

Mention several ways in which carelessness of nurses may render a patient's meals unsatisfactory while food materials and cookery may have been good.

Describe some chemical experiments which are valuable as an introduction to the study of materia medica?

Mention some advantages of having materia medica taught in the drug room.

Discuss practical methods which are useful in teaching dosage—also methods to be avoided.

Show why it is necessary for a nurse to know the diagnosis of the patients if she is to intelligently observe the effects of the drugs used.

How would you observe the principle of teaching from the known to the unknown in materia medica?

Suggest several ways by which a teacher may secure illustrative materia for use in teaching materia medica.

Outline ways and means of adding interest to the subject of materia medica.

What may a nurse learn by a visit to a pharmaceutical manufacturing establishment?

Discuss methods of emphasizing the need of accuracy in handling drugs.

CHAPTER XI

The Choice of Books

In the early years of training schools, practically the only books available were medical works from which were culled such crumbs of knowledge as it seemed wise or necessary to impart to nurses. The lecture method was largely depended on. In these classes the pupils listened and jotted down in their note books such points as they deemed important, or were able to grasp as the lecture proceeded. Occasionally a lecturer appeared with a carefully prepared outline, which was put on the blackboard so that the pupils got the main divisions and points clearly in their minds, but this kind of lecture was an exception. In many cases the lecture was a confused jumble of medical facts, medical hash, lacking clearness and logical progression in the mind of the lecturer, and containing little of real value in actual nursing practice.

The copying and verifying of these notes was a laborious process—usually done at the end of the day when both mind and body were fatigued. Recreation and off-duty hours, when the pupil should have been free to rest or to go out to play and relax after the nervous strain of the wards, were frequently spent by the nurse students of twenty years ago in poring over ponderous medical volumes trying to glean from them bits of knowledge that they felt might be useful to them in the practice of nursing. It has been from the experience and studies of this group of women—the nurse students of twenty years ago—that such progress in methods of teaching and training nurses as has been achieved, has

resulted. Having a much clearer insight into the kind of knowledge that a nurse could use than was possible for the average medical man who viewed nursing practice from an entirely different standpoint, these superintendents labored to make complete outlines of the subjects on which lectures were to be given, and tried with varying success to get the medical lecturer to adapt his instruction and teaching methods to the real needs of nurses. A revolt against this system was inevitable. By degrees, books for nurses have been evolved, that have made unnecessary much of this laborious copying of whole lectures, or of subject matter for study. Text books save time for teachers and pupil and there is now no need for any school to depend on the lecture method for the fundamentals of instruction in most of the branches.

Getting the Physician's Viewpoint.—Since the physician will always direct the management of the sick, and the nurse must always look to him for guidance, as a soldier looks to a superior officer, it is very necessary that the nurse understand the doctor's way of looking at nursing practice and methods in his particular branch. It is necessary for her to know where *he* puts the emphasis, and why this or that point is of social importance.

How to combine the valuable points in the plan of voluntary lectures by physicians with the best text-book method has been worked out differently in different schools. The following method has given satisfactory results. The first year studies are taught entirely from text-books and by practical demonstration. Text-books are used which can be completed during the first year and laid aside. There are many advantages in having the studies of each year so clear cut and definitely graded that, as in public schools, the pupils realize their studies are being advanced. They begin the second stage with

a new set of books and at least some new teachers. There is a certain enthusiasm developed in taking hold of a new book, that is lacking when the pupil handles the same book year after year, till she grows weary at the sight of it.

In the second year, when the studies in communicable diseases are about to begin, the principal of the school whose methods are suggested here, arranges for a doctor, who is dealing more or less frequently with this class of diseases, to give one lecture on the subject touching the "high spots" and emphasizing such phases of it as occur to him. After this introductory lecture the text-book is used, and the recitation method of teaching is followed. Occasionally the doctor's lecture is placed at the end rather than at the beginning of the text-book instruction.

By using this method the classes are not dependent on the hours which a busy doctor can spare for class work. They go along without interruption according to schedule, yet the nurse gets the benefit of the doctor's methods and experience which is invaluable.

Demonstration by Doctors.—If the doctor, instead of taking up all the time of his lecture with theory, can be induced to arrange for a practical demonstration of correct methods in such of the nurse's duties as he deems specially important, a valuable point has been gained. In the classes devoted to the eye and ear, in fracture work, in orthopedics, in obstetrics, pediatrics and gynecology, this is well worth trying for.

The choice of text-books can now be made from a fairly liberal supply of literature prepared especially for nurses. It is rare that a book will be found that is equally valuable for nurses and medical students, though there are exceptions. It is very apt to miss the mark in both cases. A good deal of liberty should be allowed the teacher in choosing the books to be used. So long as the

desired results are achieved with the minimum expenditure of time and energy, it is not of great importance what tools were used. In every line of activity, workmen are allowed to choose the tools to be used to accomplish a task, and the same principle of justice should apply, within reasonable limits, to the training school. Any effort to force a workman to use one tool when he rebels against it, and when he feels he could do better work and do it easier by using some other tool, is an injustice and a hindrance to good work and to real progress. Principles of economy, of course, need to be considered, before making radical or expensive changes, but the end to be achieved, and not the tool used, should be the chief consideration.

The arrangement of a text-book is an art in itself. It has much to do with making the study easier or more difficult for both teacher and pupils. Clear-cut paragraphs with sub-headings are of great assistance in getting hold of the subject. Short chapters dealing with subjects (as far as possible) in the natural order in which a nurse will have to approach her duties, are preferable to long chapters in which a variety of subjects are grouped. A text-book which represents an immense amount of labor in its preparation is often rendered cumbersome and awkward to use because of faulty grouping of material and too long chapters without careful paragraphing. A good text-book is not simply a massed number of ideas. It should group its ideas in logical divisions. It should be concisely arranged, and not make it necessary for the pupil to wander through "a forest of words" in order to cull from them one single idea.

In approaching a new subject it seems best to take first the birds-eye-view, to deal with it in its broad aspects, surveying it as a whole, then in its broad divisions, and

finally proceeding to its more minute details. This method will apply to any subject. Few things are more wearisome and discouraging to nurses than to try to follow a lot of minute details about a subject without a clear idea as to why these details exist, or how they have come to be recognized. In choosing a text-book this principle of teaching should be considered. See that the nurse gets the broad views of the subject clear in her mind, before burdening her with details which cannot be grasped till she has had fuller experience. An English writer illustrates this point somewhat as follows: In giving a description of a hospital to a person who had never seen such a building one might spend an hour in describing the minute details of the entrance—the steps, the front door, its lock, the floor, etc., but no clear conception of the place would be gained after hours of this kind of description. If, on the other hand, the purposes for which the hospital building existed were told, how the sick were provided for in wards and rooms, how for those needing surgical treatment, an operating room was arranged, how the general human needs of individuals were provided for in kitchens, dining rooms, laundry, bathrooms, etc.—in five minutes one would have a fair general idea of what such a place was like. The first hour in anatomy might be taken by beginning at the head and giving a minute description of the skull and brains, but the pupil needs to view the human body as a whole to get a general idea of its structure and functions before she can possibly understand much about the brain and its functions.

Months might be spent in studying the minute details about bacteriology without getting any very clear workable ideas concerning it. Yet in one hour by taking the general survey for the introduction to the study, the pupil can be made to see the broad outlines of the

subject, and the meaning of much that will be taught later. A well illustrated text-book along many lines, is a thing greatly to be desired.

Two difficulties that will always be found in text-books which deal with medical practice is that methods are constantly changing, and various medical authorities having different experiences have arrived at such widely different conclusions that it is difficult and often impossible to decide which authority should be accepted. For example, one authority will state that the incubation period of a certain disease is three or four days and another may say it is seven to ten days. One may state positively that ten minutes is sufficient to boil a certain article to be sterilized and another will state as positively that not less than thirty minutes should be allowed. This conflict of authority will probably always exist to some degree and the wise teacher will refrain from making positive statements on matters on which there is not general agreement.

Additional Notes.—Few if any text-books will contain every point which an efficient teacher may wish to bring out in class. The experienced teacher can or should bring out of the storehouse of experience many points which it may be desirable to impress on the class.

The free use of marginal notes, the interleaving of a text-book here and there with blank paper for adding items of interest and importance, the interspersing each lesson with apt illustrations of some point under discussion, and the underscoring of points to be specially emphasized—all add to the value of the book used by any teacher. Such a book is a veritable gold mine to the nurse who is studying how to become more efficient as a teacher. A book is rendered thrice valuable when well marked by an intelligent owner.

Teaching by the Eye-gate.—All knowledge comes to us

by means of one of the five senses, and all the senses can be and should be utilized in teaching nurses. The teacher who depends mainly on teaching through the ear will often find the instruction going in one ear and out the other. It may fail to stick for several reasons—partly because it was not tied up to something the nurse was doing or had done, partly because it was not associated with other facts that she was familiar with, partly because no effort was made to impress the fact through the eye.

In addition to the text-book the skilful teacher will always devise ways and means of using charts, diagrams, objects, pictures, etc. Each teacher should collect material for use in class work that will help to make the lesson for the day stick in the memory.

The Use of Clippings.—The teacher who keeps up with the times must of necessity read widely. She should always be on the alert to gain new ideas which may be passed along to the pupils, or which may be helpful in her work. The popular magazines of to-day frequently have special articles that are of great value along health lines. Professional magazines furnish many articles which should be preserved for future use.

In beginning a clipping system practically all that is necessary to start, is a dozen or more stiff manilla envelopes with clasps. Six inches by nine is a good size. These, properly labelled, will serve to preserve and classify the clippings and make them easily available for class work. The teacher who has accumulated reference material of this kind will rarely be at a loss when appealed to for reference matter for the preparation of papers or articles on special subjects. Such an envelope library is so valuable that no one in active work who has had one would want to dispense with it.

A reference library is, or should be, a living, growing

thing. Too often the reference library in the hospital school consists of ancient, "dead" volumes, culled from the shelves of the visiting physicians in order to make room for new, up-to-date books on medicine. Giving all due respect to the generous (?) intentions of the donors, the books are about as suitable for the use of average pupil nurses as an ancient volume on astronomy would be for a Christmas gift to a ten-year-old boy who was "fond of reading."

It is true these old volumes may, probably do, contain plenty of practical information of use to nurses, but the practical information which a nurse needs or can use may be so scattered, even hidden, may involve so much time to cull it out, that few pupil nurses, even if they knew exactly the sort of information they wanted or needed, could take time to wade through the tedious pages, the language of which is so "away above their heads" that it might almost as well be written in Latin or Greek.

Two bright, first-year nurses who wanted to know a great deal which they were "not supposed to know" desired to know something more about appendicitis than the orders on their order sheets regarding appendicitis patients told. The visiting doctor was a good-humored sort of individual, and they ventured to ask him: "What caused appendicitis?" and various other perfectly natural questions which they did not know they "weren't supposed to know." The doctor was in a hurry but told them he would bring over a book for the library in which they could read up on the subject. He kept his promise and next day presented the school with a ponderous volume on "General Surgery," containing over 1,000 large size pages. They thanked him profusely, went to their rooms, hugging the book in their arms, hunted it through and through, and through and

through again, but found nothing on appendicitis in it. A few days later they told him they had not been able to find "appendicitis" in the book, and he himself searched it through only to find that the book had been written "before appendicitis was discovered." That book was of just as much use for the nurse of to-day as is many a musty old volume such as may be found in hundreds of schools.

If a superintendent has any qualms of conscience about presenting these books to the Salvation Army to be sold at so much per pound for the benefit of the poor, she might have a set of shelves erected convenient to the interns' quarters and present them to the house staff on account of their historic interest and value. She is then ready to consider a real library.

The choice of books for a reference library will naturally depend a good deal on the amount that can be expended each year. An endowment fund of a thousand dollars if wisely invested, will yield a sum sufficient each year to provide a variety of popular and professional magazines and current literature for the use of nurses, and enough of the newer books to keep the library up-to-date.

Probably the main principle to be kept in mind in making selections is that the books should be *books for nurses*. The person who buys the books should scan book reviews carefully in search for worth while additions. Catalogues from publishers and medical book sellers will always be sent on request.

Variety is an essential principle to be observed in selecting books for a reference library. On general principles smaller volumes of books dealing with one phase or division of a medical subject will prove a better investment, than large more expensive volumes dealing with general medical practice.

There are some subjects of such outstanding import-

ance to nurses that a shelf or a small section in the library may be assigned to books devoted to them. In this class of subjects consider the following: Tuberculosis, obstetrics, diseases of children, dietetics, social service, child welfare, etc. Every library should contain a good unabridged dictionary. If space and funds permit a good encyclopedia might well be added.

If no special library fund exists, go with a definite request to the board of lady managers or the training school committee. Have a list of the books desired to be added and let them know the probable cost. A "pink tea" or "silver social" will probably provide the wherewithal, or some benevolent member of the board may be delighted to present the set. Ask for the books several times, if necessary, until the committee finally realizes that the request is important. More things are gotten by asking definitely, emphatically, always, of course, respectfully, than some superintendents have dreamed of. Quite often the alumna association of a school can be interested in establishing the library, classifying it and keeping it up-to-date with the understanding that graduates of the school share in its benefits.

FOR DISCUSSION

Discuss ways and means of combining the valuable features of the lecture method with the recitation method.

Show why the lecture plan so frequently fails and why it has been so generally discarded in teaching fundamentals.

Describe the points which in your mind characterize a good text-book.

Show why the teaching of the broad outlines of a subject first is a better method than the minute details.

Give a list of the books you would recommend in starting a reference library, assuming that a school did not possess a library of any kind.

CHAPTER XII

The Nurse at Study

The need of arranging so that nurses will have more time for study has been emphasized a good deal in recent years and a general effort in this direction has been made. It is one thing however, to arrange so that a nurse may have extra time for study and an entirely different thing to see that she uses the study time properly and wisely. Taking for granted that when a nurse was relieved from duty for study she of course would sensibly settle down to her tasks, has been founded on mistaken confidence in a great many schools. Without proper supervision of study hours, and helpful instruction in how to study, a very great many nurses will not profit by the extra time allowed.

A principal who made an experiment with three relays of nurses and eight hour duty, found that little if any more study was done than under the old system. Left to themselves the pupils spent a good deal of their off-duty time in stores, at moving picture shows, taking long fatiguing excursions, or in aimless gossip in each other's rooms. After a forenoon spent in shopping or on a walk that was too long, they often came on duty in the afternoon more fatigued than if they had been on duty in the wards. Where there is a resident instructor to direct class-room work and study hours, this difficulty is likely to disappear, but through experience and observation the necessity has been made clear of arranging for nurses, to be taught how to study and of supervising their study hours to some extent, in addition to providing more time for study.

Note-taking is much less depended on than was the case years ago but every nurse should be able to make notes of a lecture, notes that are of some value. There are in most classes pupils who are capable of excellent work in the wards who are conscientious, observant, quick, accurate, thoroughly reliable, and kind, who get hopelessly muddled in the matter of note-taking. One glance at the notes which nurses have made of a lecture will show who are the pupils who need some special help and instruction in how to take notes. Without such help they are going to be at a disadvantage all through their course. This kind of instruction should be given during the probation period. Even one-half hour spent in teaching pupils how to take notes will help them to approach the task and handle it in a much more satisfactory manner.

The chief secret of note-taking is in being able to see the important point in a sentence—to pick out the kernel, as the lecturer proceeds, and in a few words make a record that will enable the pupil later to recall and reconstruct the teaching given. That is the thing to be aimed at.

One of the best ways of teaching this is to take a well-arranged chapter of a book, which has no paragraph headings, and require first year nurses to make an outline of the chapter, then to elaborate their outline by inserting in each division notes or headings of the important points. An excellent book for this purpose is the volume "Preventive Medicine" by Woods Hutchison, M. D.

Required Reading.—In many schools in addition to the books handled in the class room, there are certain other books required to be read by the student in each year. The book referred to, "Preventive Medicine," or certain chapters in it might wisely be prescribed for first year

pupil nurses, as a preparation for the studies which are to follow in the second year.

Assign the first chapter on "The Body Republic" for outline work. Go over a page or two underscoring important points and require a written outline to be handed in within a certain time. Sort out the papers in which the poorest work is shown, and devote a half hour to showing the pupils who handed in poor papers how to do better.

Written-oral questions (so-called) are often used to advantage in the earlier months of training and especially where there is limited time for correcting papers. The teacher selects and asks questions which can be answered in a single sentence, and the pupils write the answers as the class proceeds. Before the lesson period closes, the teacher gives the correct answers and the pupils compare and revise their own.

How to make their knowledge available on demand is an exceedingly important thing for nurses to acquire. In many kinds of work the habit of going slowly and referring to all sorts of authoritative sources before coming to a decision, may be no disadvantage but in nursing such a habit is disastrous. The nurse will constantly be called to use her knowledge in emergency, and to instantly act. Failure to be able to do this will mean a calamity many times. She must be taught how to make the knowledge she acquires available on demand. Proficiency in one thing will not compensate for ignorance in another branch that is important. When a nurse is confronted with a serious hemorrhage if she does not remember what to do, it will avail the patient little if she knows all the tests that were ever invented for urinalysis. She can afford to take time to consult a book of reference about urinalysis—as a rule—but not in a case of alarming hemorrhage.

The story is told of a young graduate in medicine that soon after his graduation he was called to a serious fracture case. "I haven't done anything yet in the way of fractures" he confessed to the one who called him, "but" he added hopefully "I'm the very devil on fits." The successful nurse must know how to act when confronted with both fractures and fits. She must be taught how to sort out in her studies the knowledge that is useful to a nurse by way of general information, and the knowledge that she is fairly certain to have to apply in practice, when quick action is required.

Difficulties Analyzed.—A close observation of nurses who seem to have difficulty in studying, will usually show that the individual concerned is either half hearted, not wholly in earnest about her work, or she is allowing her mind to dwell on outside affairs, or she has acquired the bad habit of "dawdling" over her studies.[1] "Many well-meaning students take a text-book with them when on a holiday, sit down on the beach, look up at the sky, wonder if the water is too cold for a dip, read the first line over again, close the book, think of something else, yawn, and go for a walk. Apply the principles concerned to things more material and see how utterly incompatible with progress such methodless work is."

In teaching nurses how to study one of the first points to emphasize is that when they attempt to play they should really *play*, and work when they are supposed to work. In other words they must cultivate the habit of concentrating on the thing they are trying to do whatever it is. A good motto to try to live up to is "Whatsoever thy hand findeth to do, do it with thy might." It is quite as necessary sometimes for nurses to be taught to play as to be taught to work. They must learn the value of diversion and relaxation if they are to be able to

[1] Edwin Wooton.

bring to their studies the alertness of mind that really accomplishes what is attempted.

"*The one and only secret of memorizing* that which we read is *exclusive* attention. For the time the mind must be completely concentrated on the facts set forth by the page. That may seem to be quite easy, but it is not so always. The mind is so constituted that, more frequently than not, while one is trying to acquire the facts, one is longing for the moment of release, or for dinner, or something else equally without any helpful bearing on the work in hand. The purpose of all study being instruction, it *must* be memorized if it is to have any permanent value. In brain work it is provedly true that one cannot at the same moment serve two masters satisfactorily. Exclusive attention means concentrating it on the subject of study; it means barricading the consciousness, so far as may be, to everything else. With some this is a natural power; others acquire it; some possess or acquire the power only to a negligible extent. These last attain to success only by an expenditure of time and effort 'that raises the question'—Is the game worth the candle?"

"It is frequently stated that the human mind cannot think of two distinct subjects at the same moment. That, strictly speaking, is correct, but a current of thought and one of quite distinct but more passive consciousness may obtain at the same moment. Thus, while one is reading the physiology of the circulation, one may be passively concerned with the question if there will be potatoes for dinner. One can scarcely term it subconsciousness; it is rather an underlying, insubordinate consciousness.

"Some students take such trifles, or a chronic state of worry with them when they sit down. That is blameworthy; not so if one is the victim of the street musician, or the distracting chatter of bystanders.

"*What Inattention Really Does.*[1]—Psychology teaches us that if we wish to memorize anything, but cannot give it our exclusive attention, it is well not to give it any. This will leave us free to renew our effort with uninjured powers. On the other hand, to divide the consciousness between two unrelated subjects is not only to waste time, but also to lessen the mind's power of later mastering the matter which we have failed to memorise.

"A fact is like a graving tool, and the mind resembles a blank plate that is to be engraved. If a fact is read visually or is heard, but in either case without attention, that fact becomes blunted; it ceases to have any power of cutting into the memory."

The control of a wandering mind is something so wonderfully well worth trying to achieve that every nurse should study how to reach it—for her own benefit as a student, for the benefit of the patients who have lost the mental grip of themselves and whose minds are exercising an adverse influence on their bodies. There is no royal road to such an achievement. Much depends on the strength of the determination of the person to really get control of his thinking.

Mental Gymnastics.—There is a great variety of mental exercises or drills that may be used to help to fix the attention and which tend toward thought control. The following is worth trying again and again until one is able to do it perfectly.

Close the eyes. Imagine a large figure one (1) at the point of the nose. Make it recede. Watch it apparently grow smaller and fainter until, finally, off in the distance, it fades out completely.

A doctor who has made a special study of psychotherapy and who has aided a large number of patients to attain control over their thinking, recommends the following group of three exercises to be done in the order

[1] Edwin Wooton in the Nursing Times.

and way prescribed. He emphasizes the point that to obtain results it is as important to do them properly, as it is necessary in order to open a combination safe lock, to use not merely the necessary numbers, but the correct turns also, before one may hope to open the door. He suggests that if the exercises seem to anyone to be inefficient in producing results, it is well to suspect that they were improperly performed, and aim to improve the method rather than to discard the prescription.

1. The first exercise is an emphatic declaration of the will. Assert that you can and will control your mind, and not be the slave of ever-wandering thoughts. The greater the emphasis, the better. Stamping the foot by way of reinforcing the resolution, is a help.

2. Concentrate the attention on some one thing, to the exclusion of everything else. For example: Close the eyes; imagine a blackboard and describe the figure of eight again and again, keeping up the procedure to the longest possible limit, till the thoughts refuse to remain on the figure another second.

3. The third exercise is—combine act with thought. In other words do something and think about it, and nothing else. For example take deep breaths and hold the mind to the act of breathing, to the exclusion of everything else. This comprises the group of exercises which should be repeated several times each day until the wandering mind or the mind obsessed with fear or with some vague trouble is brought under control.

How Many Subjects?—How many studies can a nurse on a regular duty in a hospital carry at one time and do justice to them? This is a question that thrusts itself upon us from time to time. It is a question which ought to be asked and answered by every training school. In multiplying subjects unduly may it not be possible that we are hindering good work, with the best intentions

in the world. In other words, is it better to have two or three classes a week on one subject till the course is finished—say, in materia medica—and finish up in a short time the work outlined for a year in that subject, or is it better to try to teach materia medica, anatomy and bacteriology all at the same time, stringing the classes out over a longer period, burdening the nurse with the study of three widely differing lines?

By careful study and planning as to the best way to manage such work with the least strain, may we not find a way by which better work can be done? It is so easy to give a smattering, to think we are doing efficient work, because we are holding so many classes, and yet be deceived as to what the nurse has really learned.

The noted William Rainey Harper, one of the greatest educators of his generation, is quoted as stating his opinion that "no student can *really master* from four to six studies at a time. Two at a time is the limit of human capacity *for efficient and thorough work.*"

If this be true of students, is it not doubly true of nurses who are absorbed with the daily work and the human needs for which they are held responsible.

If our ambition is to hold so many classes regardless of the efficiency of our work, it makes little difference whether we consider this subject or not. But a little study as to how to attain the best results for the pupil with the least waste of time and energy might be beneficial in many schools.

FOR DISCUSSION

Outline a system of arranging off duty hours for pupil nurses in three relays suggesting how class work may best be carried on under such a system.

Give a description of an ordinary day's work for an instructor of nurses in a school having one hundred pupils, and twelve probationers.

What is the best time for night nurses to study?

If you were giving suggestions to a nurse regarding taking notes in long hand, would you advise her to take copious notes or to try to have them concise—give reasons for your answer.

When a nurse emphatically and habitually states that she cannot study what reasons are commonly found?

Show the relation of the right kind of play to habits of study.

What measures may a teacher use to help a pupil who has a poor memory.

Discuss the subject of how many subjects a nurse on regular duty in a hospital can successfully carry at one time, giving the result of your observations in this matter.

CHAPTER XIII

Training in Conservation

The possibilities of waste in a hospital are tremendous, and the amount of useful work which an institution is able to do has a very direct relation to every-day waste and loss. How to reduce this waste to the lowest possible point is one of the problems that confront every superintendent or principal. The success which is achieved will be in direct ratio to the extent to which she is able to secure the coöperation of heads of departments, pupils, and employees, in preventing waste that is avoidable. This coöperation is very largely dependent on instruction in the cost of supplies, on right methods of use and on proper accounting for the supplies and appliances used in each department.

The young woman who is beginning her training in the wards has probably never before seen such quantities of bed linen, dressing materials, drugs and ward supplies of all kinds, as are supplied for her use without any expense to her. She is hardly to be blamed if she sees no limit to the available supply and, if, in her ward, she associates lavish use of these articles with good nursing. If she has no conception of the cost of the things she is handling and sees no limit to the amounts, she cannot reasonably be expected to use good judgment in regard to them.

Teaching the cost of ordinary ward supplies and furnishings is as good a place as any to begin in the teaching of conservation. Beginning with one bed and its equip-

ment, teach what it costs to replace each article. Costs are constantly changing but the following figures will serve as an illustration at the present time—early in 1918.

Bedstead $10.
Mattress $10.
Rubber sheet $2.50.
Mattress cover or pad $1.50.
2 pillows $4.
6 sheets $9.
6 pillow covers $3.
4 blankets $14.
2 spreads $3.
4 nightshirts or gowns $4.
12 towels $3.
1 bedside table $8.
2 bedside chairs $8.

The cost of screens, back-rest, hot-water bottles, chart files, silver, dishes, basins, bed-pans, wheel chairs, etc., shared by patients in a ward or department if divided by the number of beds will approximate $20 for each bed, bringing the total cost of the equipment for each bed up to over $100. Multiply $100 by ten beds in an average ward and there is represented an expenditure for equipment of over $1000.

Show how the wear and tear on a bed may be decreased or increased by proper handling. Have the pupils observe how mattresses are misused; how rubber sheets are ruined; how carelessness in handling lessens the life of a sheet, blanket, or other appliance.

Teach Laundry Costs.—Much of the wear and tear on bed linen is given in the laundry. Lavish use of linen is more costly to hospitals than any nurse can realize, unless shown in actual figures. If no attempt is made to instruct nurses how to use linen so as to reduce waste from unnecessary washing, they can hardly be blamed for too lavish use, which amounts in the long run to abuse.

It is estimated that each plain article that is washed requires to be handled thirteen times, and each starched

article not less than fifteen times, some of them seventeen, in the laundry process. Have the pupils list the processes—the handling of one sheet from the time it is taken off the bed and deposited in the soiled clothes bag, till it is returned clean to the shelves of the linen room. After itemizing these processes—sorting in the laundry—placing in the washer—out of the washer, etc.; let them multiply it by the number of articles sent to the laundry in a single day. Then let them go through the laundry, and see the linen being put through these various processes.

Teach the cost of laundry supplies—soap, bluing, bleaching powder, etc., and after this kind of practical instruction a good foundation has been laid for an effective appeal in how to reduce waste in the laundry by the simple method of taking better care of the linen while it is in use, and making it last longer, so that fewer articles will be sent to the laundry every day.

Teach food costs and how food is wasted. Food costs are constantly changing—usually moving in an upward direction. Let the nurses know the size of the milk bills, the meat bills, the bread bills, etc. An instance of the value of this kind of teaching was cited by Miss Lulu Graves dietitian of Lakeside Hospital, Cleveland, at a meeting of the Ohio Hospital Association, in a plea for the better education of kitchen employees in regard to the cost of food.

"Enlightening and educating kitchen employees is a profitable thing to do," she said, "The cooks at Lakeside Hospital are told each month the total of the bills for meat, vegetables, milk, eggs—in fact, of everything they use—and comparisons are made with previous months. The most effective example of the value of this was shown when they were given these amounts for the first time about two years ago.

"Trying to impress upon the cooks the need of taking care of meat had been a most discouraging task, but when they were told that the meat bill for this particular month was $2,500 one of them said, 'If I had that, I could buy a house.' They were atonished. The next day one of them brought to me some pans containing small portions of different kinds of meat which had been left in the carving for the several groups in the house and asked what could be done with it. Every bit of it could be used to advantage for someone. When the plans for utilizing were finished, he said, 'We used to throw all that away, but never again!' "

Pupil nurses and head nurses need this kind of instruction quite as much as kitchen employees and if their full coöperation in preventing waste of food is to be secured, such instruction must be given, not only early in their training period but at intervals all through the course.

The Cost of Wasted Bread.—New lessons of economy are being forced upon us by the present soaring cost of the necessities of life. Especially is the high cost of flour being felt everywhere. Hospitals that have prided themselves on their economical methods are finding new ways of jolting their corps of workers out of apparently petty waste, which is far from petty when the waste of each day is calculated by months or a year. The following figures and comments from a scientific weekly may help to impress on nurses and hospital workers in general the cost of waste of just one item of food stuff—bread.

"If we say that every human being is entitled to the food that he needs, we must also say that he is not entitled to any more than he needs, and that it is as wrong for him, through carelessness or malice, to destroy the food that properly belongs to another as it is to rob him of his money or anything else.

"A SINGLE slice of bread seems unimportant. In many households one or more slices of bread daily are thrown away, sometimes stale quarter or half loaves are thrown out. Yet one good-sized slice of bread, such as a child likes to cut, weighs an ounce. It contains almost three-quarters of an ounce of flour. If every one of the country's twenty million homes wastes on the average only one such slice of bread a day, the Department of Agriculture has figured out, the country is throwing away daily over 14,000,000 ounces of flour—over 875,000 pounds, or enough flour for over a million one-pound loaves a day. For a full year, at this rate, there would be a waste of over 319,000,000 pounds of flour—1,500,000 barrels of flour—enough to make 365,000,000 loaves. As it takes four and one-half bushels of wheat to make a barrel of ordinary flour, this waste would represent the flour from over 7,000,000 bushels of wheat. Fourteen and nine-tenths bushels of wheat on the average are raised per acre. It would take the product of 470,000 acres just to provide a single slice of bread to be wasted daily in every home."

At the Cleveland Convention of the American Hospital Association a method of checking waste by daily charting the amounts of supplies used in each department was presented by Dr. J. H. Moss.[1] In a study begun in 1916, it was found, says Dr. Moss that "although we had practically the same number of patients' days in September as in August, with one day less to feed employees and nurses nevertheless we used in September 255 pounds more meat, 40 pounds more fish, 62 pounds more coffee, 334 pounds, or one barrel more sugar, 122 pounds more of poultry, 325 loaves more of bread, 25 pounds more of butter and 167 dozens more of eggs." "Two things were shown in this analysis," says the

[1] Superintendent of the Hebrew Hospital, Baltimore.

writer. (1) That we were wasteful and unbusiness like. (2) That we had no system or means of controlling the situation unless we could have a daily check on what we were doing. Thus we devised the chart system as explained in Figs. 5, 6, 7 and 8 with the patients as an indicator. The superintendent is then in a position to judge whether or not the consumption was justifiable. This record is brought every morning to the superintendent's office, the items are charted, and comparisons made.

"The several heads of departments are required to keep a daily record of supplies used (indicated in Table 3) justifiable according to a budgetary per capita allowance. If not, the head of that particular department is called to explain, and we do not have to wait until the end of the month for the information. If the chart of the previous day shows an increase in the number of patients, we justify a reasonable and proportionate increase in the quantities used; if, on the other hand, there is a decline in the number of patients, we expect a reduction.

"Thus we commenced this charting system on October 1, with the result shown in Table 2. Having the same number of patients' days in October as in September and an additional day to feed nurses and employees, we consumed nevertheless 637 pounds less of meat, 60 gallons less of milk, 130 pounds less of fish, 162 pounds less of coffee, 467 pounds less of sugar, 127 pounds less of poultry, 40 loaves less of bread, 40 pounds less of butter, and 112 dozens less of eggs.

"We keep a chart of the telephone calls made daily, and, when there is an unusual increase, we check up the record kept by the operator and try to locate the abuses. This has already cut down our telephone bills. The system lends itself to a study of almost any article or

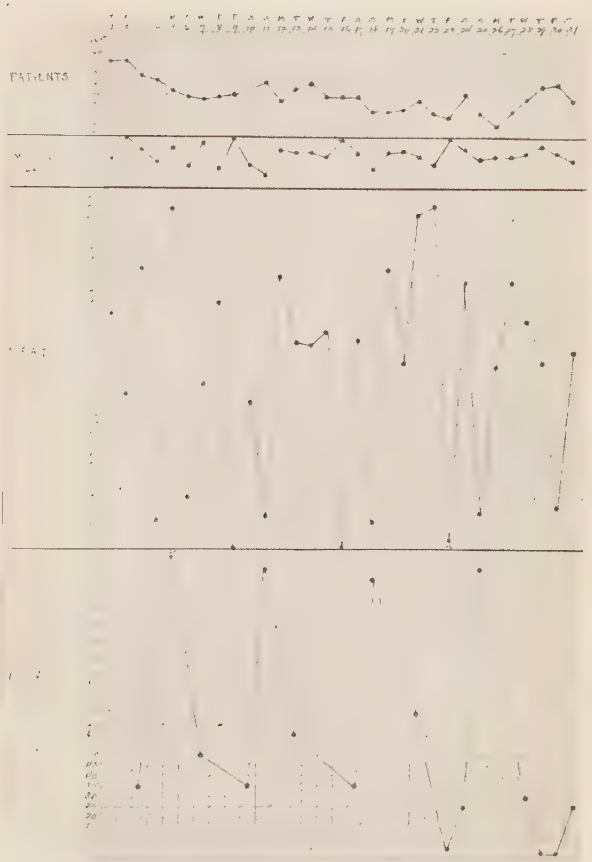

FIG. 12.—Chart showing daily consumption of milk, meat, and fowl in March, 1917. (H. J. Moss, M. D., in "The Modern Hospital.")

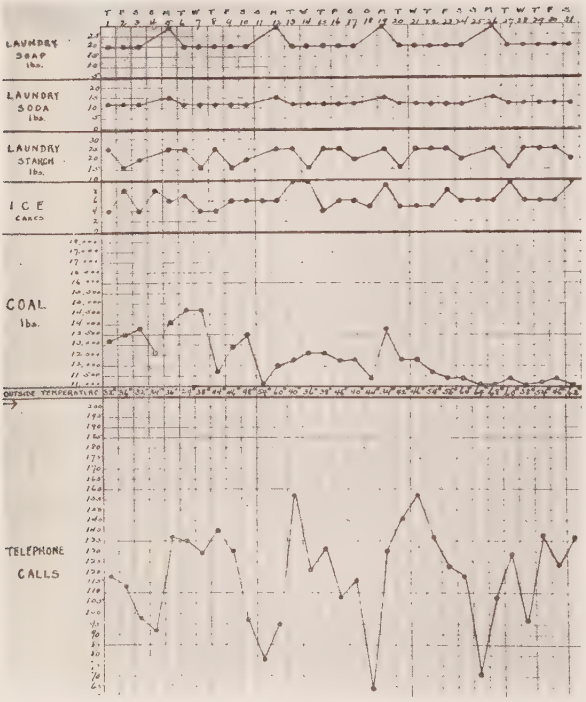

FIG. 13.—Chart showing consumption of laundry soap, laundry soda, starch, ice, and coal, and number of telephone calls in March, 1917. (H. J. Moss, M. D., in "The Modern Hospital.")

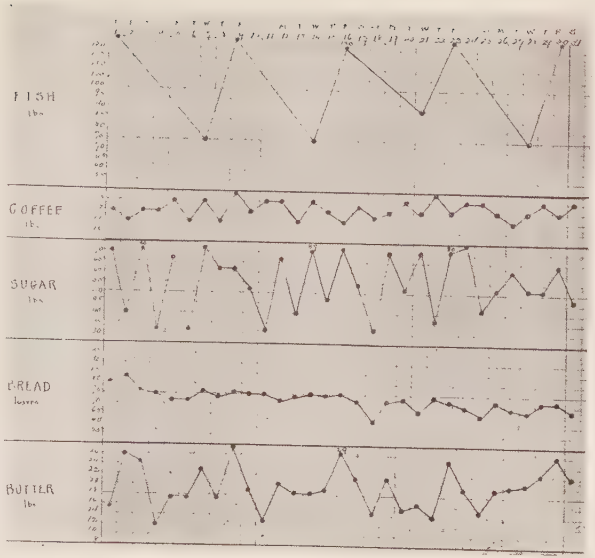

FIG. 14.—Chart showing consumption of fish, coffee, sugar, bread, and butter in March, 1917. (H. J. Moss, M. D., in "The Modern Hospital.")

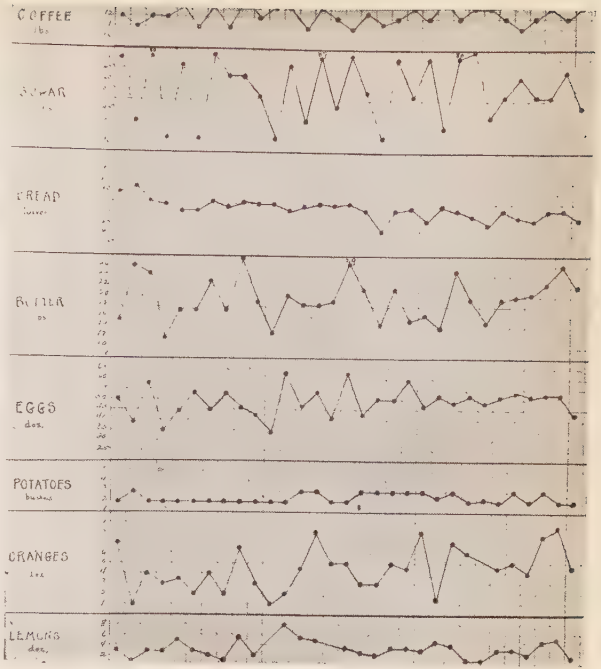

FIG. 15.—Chart showing consumption of coffee, sugar, bread, butter, eggs, potatoes, oranges, and lemons in March, 1917. (H. J. Moss, M. D., in "The Modern Hospital.")

item in which we may be interested. Since the preparation of this paper we have added to the list a study of gauzes, cotton, adhesive, catgut, and gloves.

"The direct results have been advantageous in the following ways:

1. The moral effect has been universally noteworthy throughout the hospital. All employees know that the head of the institution has a daily knowledge of their efficiency or inefficiency.

2. The heads of the departments themselves have a scientific understanding of what they are doing, and can make daily comparisons.

3. The system has stimulated a lively interest in everyone to try and reduce quantities, and at the same time provide the absolute needs."

Larger hospitals will find such a system more necessary and more easily workable than smaller institutions in which the superintendent is able to maintain a closer supervision over the work of all the departments but without question most institutions could adopt this business-like system with material benefits to the treasury.

Object Teaching.—In teaching the cost of the smaller articles and appliances which nurses are required every day to handle various methods have been devised. One superintendent has mounted on heavy cardboard pictures, clipped from advertising pages of magazines or from catalogues, of most of the commoner articles and utensils. Below each article the price is marked. Rubber goods such as hot-water bottles, catheters, rectal tubes, douche nozzles, air cushions, nipples, gloves, etc., are mounted on a board by themselves for easy reference. Such lists prepared for each department and posted where the pupils can consult them readily have a teaching value. Articles made of glass may be listed

on another board—thermometers, glass tubes, medicine glasses, connection tubes, baby's feeding bottles, nozzles, glass barreled syringes, urine measures, etc. For use in instructing probationers in the class room the articles themselves should be used. The ways in which waste, breakage or loss is most likely to occur should be pointed out and how to guard against the abuse of these articles in every-day use.

The plumbing of a building is an exceedingly important part of its sanitary equipment. It is, as a rule, constructed as nearly "fool-proof" as possible, and with general observance of ordinary precaution, should cause little trouble. In teaching conservation, include instruction on the care of plumbing. Show how carelessness may disarrange the whole system. A study of plumbing troubles extending over a few months will show a variety of causes. A match carelessly thrown into a sink, lodged across a pipe, gathered to itself lint off the dish cloths and towels, and formed an effective dam. A nurse in a hurry emptied a basin of water with a cake of soap in it into the toilet with the usual results. Another nurse let the cap off an ice-bag drop into the toilet and said nothing about it until a disastrous flood had damaged walls and ceiling of two rooms below. Taking for granted that nurses will take proper care of plumbing without any instruction is one of the surest ways to have plumbing troubles.

The Misuse of Hospital Appliances.—Because we retain more vividly impressions gained through the eye, it is important to try to enforce such lessons as how to avoid waste and loss through misuse, by object teaching. Every hospital could without much delay or difficulty collect an exhibition of articles that have been ruined because of misuse. Such a collection added to year after year, properly arranged and labelled will teach a lesson,

in what not to do, that could not be as well taught in hours of exhortation through the ear alone.

Waste of time and human energy furnishes a large part of the waste that goes on continually in hospitals. Much of it seems unavoidable often, owing to faulty planning of the building. Yet when a superintendent is on the alert to reduce waste of steps and time, methods by which this may be accomplished can nearly always be worked out, that will effect large saving in time and human energy. By the simple expedient of turning a couple of double wardrobes costing about $10 each, into linen cupboards by having shelves put into them for the linen supplies most frequently used—sheets, pillow covers, night shirts, towels and wash cloths and placing these cupboards close to the wards, nurses have been saved miles of walking every day to the one large linen closet belonging to one long corridor which was practically 100 feet long.

By having a water pipe with a faucet and bowl placed below a medicine cupboard, numberless steps were saved in going after water to give with the medicines.

By giving each head nurse a locked cupboard for supplies and appliances over which it was necessary to exercise special supervision, by providing sufficient dressing baskets so that several dressings may be done at once in a ward or department, by a few changes in the arrangements for tray-setting an immense saving in time has resulted. This saving will probably not show in the profit and loss columns of the accounting system, but it is none the less real and it contributes very materially to training school efficiency. It is hardly necessary to point out that the time a nurse wastes in travelling unnecessary miles in long corridors in badly planned buildings, lessens the time and strength she has to give to the actual personal care and comfort of the patients.

It contributes to excessive fatigue which is always a hindrance to good mental work by the pupils in the training school.

The rising cost of all supplies and appliances which are handled by nurses is forcing a more careful study of how to utilize many things which formerly were discarded as of little or no value. Very definite methods of reducing cost without lowering efficiency have been worked out because of the increasing expenses of war time which are worthy of careful study and of being incorporated into the instruction of students.

Efficiency experts have given years of study to methods in the business and manufacturing world by which the quantity of work has been increased, the quality improved and the workers meanwhile kept healthy and happy. They have shown how one may take less time, less material, less labor and fewer men and by applying principles of scientific management to the task, by studying the problem as a whole, by using newer methods, greater results can be produced.

Efficiency has been analyzed by experts as consisting of five things:

First, producing the most work.

Second, producing the best work.

Third, doing it in the easiest way with the least expenditure of energy.

Fourth, doing work by methods which conserve health.

Fifth, doing work by methods which prolong life.

Principles of Work.—Emerson in his study of efficiency has established twelve definite principles of work which indicate the way to reach efficiency.

1. Clearly defined ideals.
2. Common sense.
3. Competent counsel.
4. Discipline.

5. The fair deal.
6. Reliable immediate accurate records.
7. Despatching.
8. Standards and schedules.
9. Standardized conditions.
10. Standardized operations.
11. Written standard—practice instructions.
12. Efficiency rewards.

In hospital schools some progress has been made in recent years along these lines, but there is a lurking fear that effort to apply these principles of scientific management is carried far in a hospital, it will lead to mechanical nursing. How far this fear is justified remains to be seen. Back of the unwillingness or inability to change that is apparent, is the fact that a mass of tradition has grown up in training schools which hampers progress.

A study of the twelve principles of efficiency would probably show that the wise application of every one of them to the routine work of a hospital would be well worth a trial in every department.

Efficiency Rewards.—Prizes for practical suggestions for promoting economy of time, strength or material or for improvement along any line have been made a regular part of the system in many business houses and manufacturing establishments with very beneficial results. As a means of stimulating the study of conservation, and of securing the fullest coöperation of the employees and students in a hospital the plan is worthy of adoption. The matter of setting aside of a couple of hundred dollars, divided into prizes of varying amounts, for practical suggestions that would seem to offer possibilities for saving much larger amounts, might be delegated to the woman's auxiliary for a trial period. In a paper on the subject of Hospital[1] Efficiency Dr.

[1] Presented at American Hospital Association Convention, 1912.

Thomas Howell called attention to this subject as follows:

"The modern hospital has on its payroll a large number of fairly intelligent people, but it is safe to state that not over ten per cent. of them ever offer suggestions for the improvement of the service. The remaining ninety per cent. must have good ideas, or at least could produce them if the proper stimuli were applied.

"I have no doubt but that our doctors, nurses, orderlies, porters, plumbers, carpenters and engineers have at times excellent ideas for improvements which they are reluctant to offer because they have never been asked to do so, or because they are doubtful of the reception they would receive, or because they feel that "there is nothing in it for them."

"If they were told that their suggestions were desired, that they would be given careful and impartial consideration, and if found useful they would be paid for them, we might have less destructive and more constructive criticism than we have now.

"The more thinking, active workers a hospital has the greater will be its producing power and the more efficient its service."

FOR DISCUSSION

Have each supervisor carefully observe for two weeks points at which preventable waste occurs in your institution—covering use of electricity, gas, milk, and food supplies, soap, matches, printed blank forms, drugs, solutions, and dressing materials with suggestions about prevention of waste.

Plan for a conference on labor-saving devices which seem practical and desirable. Estimate the cost of installation of such as seem desirable for your institution.

Study ways and means of saving time and steps of pupil nurses.

Discuss the methods of saving which may be effected in regard to laundry work without any lowering of quality of service.

Show how specimens of misused hospital appliances are valuable for object teaching. Discuss the cost of general ward appliances and how nurses may reduce the loss due to breakage and misuse.

Give the principles which have been worked out by experts in regard to efficiency.

Show how these may be applied in the hospital every day.

CHAPTER XIV

The System of Training and the Senior Nurse

A system has been defined as an assemblage of objects arranged in regular subordination or after some distinct method; a complete exhibition of essential principles or facts arranged in rational dependence or connection.

Nursing has gone through much the same order of experience that most other sciences have gone through. We have first done the practical things, then studied out the science relating to them, the best methods of doing the things we were doing in a more or less crude way, the principles that have consciously or unconsciously governed us while doing the work.

One of the greatest defects of the present system is found in the generally—admitted fact, that it produces nurses, the great majority of whom do not study after they leave the school, do not strive to develop themselves once they have gotten a diploma, have no ambition to continue their education, who do not appreciate the difference between a "skilled trade" and a profession.

Why do not the majority of nurses show any ambition to study after graduation? An analysis of the causes and how to change this condition, should be a profitable line of study for any superintendent or principal to pursue.

Have the pupils been trained to lean back and expect to be led by a teacher every step of the way, from the beginning to the end of the course?

Has anything been done to develop women who will be able to study without teachers or classes?

Have they been trained to ask intelligent questions about the patients and then sent to find the answers to those questions? Do they know anything about research work?

Have the senior and intermediate pupils been taught and required to conduct quiz classes so that they stick to their subject and really accomplish something, or has the teacher marked out every lesson, and literally spoonfed them with instruction, which they should have been taught to gather for themselves? These are important questions today, when hospitals are being urged and stimulated in all possible ways to meet new or unusual needs which have arisen as a result of the world war. There are only twenty-four hours in a day. The big problem is how to make every hour count in real benefit to a nurse—in ways that will make her able to render, larger better service to her country and to humanity in general.

Two or three things need to be done if we are to be able to graduate nurses with a wholesome ambition to continue their studies along some given line, and not consider their education finished when they receive their diplomas. Senior pupils should be expected to review their medical, surgical, obstetric, and general clinical studies for their final examination—very largely without teachers or classes. They should be helped, while in the school, to choose some line of nursing activity about which they will study after graduation—and while in the school should be given a start along some one definite line apart from bedside nursing.

For the benefit of graduate nurses several courses of study which may be pursued by a nurse without dropping her breadwinning occupation, should be definitely outlined by some institution or organization, preferably a university school. This method is pursued in regard

to studies in law, theology, etc., why not in regard to special lines of nursing—after the nurse has acquired a good foundation.

How can the senior year be made most valuable for nurses, and for the institutions, the patients, the public whom they are to serve? If we have done faithful well-planned work in the preceding years, time has been gained, and some optional courses may be provided.

Child welfare work is being promoted in a great variety of ways and the nurses of the future are certain to have a larger part in it than they have had heretofore. Taking for granted that nurses have been taught to deal with children's *diseases*, what can be given them in the intermediate and senior years that will help them to better understand a normal child, to detect when conditions are adverse to a child's wholesome development. There are any number of books dealing in a practical way with the psychology of the child which at least should be suggested to nurses. There is not time to do much more than suggest ways and means of observing and studying child life as a nurse comes in contact with it, in the course of her work or recreation, but it is worth much to a nurse's usefulness that she be at least started in such a study. Some of the best schools have found a course in kindergarten methods, with a bit of child psychology worked into the course, a wonderfully attractive study, and there are few nurses who have had such instruction who will not sooner or later be glad of it, and find many ways of using the instruction obtained.

A course in story-telling would be valuable especially to private duty nurses, but the nurse who was an accomplished story teller would find a great many uses for it in institutions, in the convalescent and children's wards and in sanitaria of all kinds.

The little book[1] "Stories and Story Telling" gives a good foundation for such a course. The chapter headings of this book indicate the scope.

1. The educational value of the story.
2. What a story really is.
3. The use of idealistic stories.
4. Realistic stories and how to use them.
5. Some vital characteristic of good stories.
6. Some tricks of the story-teller's trade.
7. Learning to tell a story.
8. The story interests of childhood.
9. The story interests of early adolescence.
10. The story interests of later adolescence.
11. How to use stories.
12. The sources of the story's power.
13. Where to find stories.

The personal development that would come to nurses were they wisely instructed in the art of story telling, and encouraged to practice the art as faithfully as we expect them to practice bandaging, would certainly be far beyond that which results from the same amount of time spent in some studies which a nurse will rarely have an opportunity to use.

A good practical course on psycho-therapy and occupation-therapy might wisely either precede or follow the course on story-telling. Without doubt it is difficult to find a doctor who is enough interested to give a satisfactory course on psycho-therapy, but difficulties rarely, if ever, constitute reasons. The chief difficulty lies in the fact that we have gotten into a rut and it is hard to get out of it. We know, whenever we stop to think about it, that faith in the curative value of drugs is dwindling even in the medical profession, and that faith in physical exercise and mental remedial measures is

[1] By E. P. St. John.

increasing, but we devote multiplied hours to materia medica, and often fail to devote even one hour to instruction in the laws of the mind, or how the mind exerts its subtle influence over the physical processes of the body.

We know that the mortality rate from the degenerative diseases of middle life and of old age has increased markedly in the last quarter of a century, that the premature breaking down of the important organs can be checked by a proper régime, but somehow we fail as a rule to send out nurses who know how to measure up to the demands of the age in regard to this type of patients. A well known New York physician[1] has stated this need as follows:

"We need a new type of specialized worker; namely, the 'trainer.' The majority of patients suffering from chronic disease do not need trained nurses; they need the services of an individual who knows the principles underlying nutrition, who has had some training in practical dietetics, who can give a tonic bath, who can teach proper breathing, who knows the art of relaxation, who knows that a low voice and a placid exterior are inconsistent with a state of tension and panic, who realizes that the easiest way to stop thinking of anything is to stop talking of it, one who can walk and run and rub and stretch and knead and play, who can divert and distract, who has some idea of the principles underlying concentration on the one hand and abstraction on the other, who can inculcate such universally accepted truths as that which says that happiness has less relationship to material possession than it has to mental and emotional poise; finally, one who can teach point of view.

"We need trainers for backward children, we need trainers for those who have to reach out for every aid that

[1] Dr. Joseph Collins.

physical and mental measures can give them in order to regain sufficient bodily strength and emotional equanimity to successfully do their work, and it is from the nursing profession that these trainers are to be recruited."

A suggestive outline for a beginning course on psychotherapy is as follows:

1. The nervous mechanism. Personality and habit.

2. Heredity, environment, and occupation. Their effect on mental health.

3. The laws of the mind. Conscious and sub-conscious mind. How to study the patient.

4. Abnormal fears and their relation to health. Suggestion and auto-suggestion.

5. What worry does to the body. Faith as a therapeutic agent. Influence of various cults and creeds on medical and nursing practice.

6. Work and play. Types of recreation. Ways of promoting mental rest.

7. Mental hygiene methods applied to various conditions—insomnia, indigestion, etc.

8. Re-education. What it is—the nurse's part in it. Cardiac patients. Mental attitude of tuberculosis patients.

9. Re-education continued—study of special cases and needs. Handicapped patients, orthopedic patients, etc.

10. Occupation as a therapeutic agent.

Discussing the subject of re-education a teacher[1] of occupation therapy states that she has found the following outline helpful in studying the patient.

"We are all," she remarks, 'children of a larger growth,' and, after all, re-education is simply child-training in a new form. Must we not meet each patient as an individual, and with a thoughtful consideration of the developing forces of life, in order that we may lead

[1] Mary Irving Husted.

her to an understanding of herself and the equipment of herself for taking up life afresh? As people talk with me of past experiences and look forward into the years to come I find that I ask myself certain questions which may be classified in some such form as this:"

I. The Patient's Past.

1. Why did she choose her special vocation?
   A. Inclination?
   B. Force of circumstances?
2. Why did she prove unequal to this work?
   A. Did the strain come from the nature of the work itself?
   B. Did the strain come from outside causes?
      a. Hygienic conditions?
      b. Environment?
      c. Outside demands upon her strength?
   C. Was the patient fitted for this special vocation?
      a. Lack of training?
      b. Temperament?

II. The Patient's Present (During Illness).

1. Antipathy to old work.
   A. Because unsuited to this vocation?
   B. Because the actual conditions are exaggerated in the patient's mind through memory of the effort necessary to carry on that work when physically unequal to the task?
2. A realization of the fact that the former reasons for choosing this work may again make it necessary.
3. A dread of the old struggle.

III. The Patient's Present (During Convalescence).

1. The return of a vague interest in life.
2. A wish to consider the future.
   A. (*First*) The desire to try a new field, feeling that anything new will be more possible than the old work.
   Second) With increased strength comes the natural facing of personal responsibilities and the question as to what extent they should be considered.
   (*Third*) With the nearer approach of normal health comes the power of judging more fairly one's relation to life.
   a. Governing influences.

1. Natural fitness.
2. Training.
3. Experience.

b. The relation of one's life to other lives.

c. Probable future physical condition.

B. In more advanced convalescence comes a return of interest in old problems, combined with a realization of the value of experience in future usefulness.

C. Choice between returning to the old mode of life or taking up an entirely new life work.

a. How best to meet the old obligation.

b. Re-education in the sense of technically fitting oneself for a new career.

Teachers of occupation-therapy are almost as difficult to secure as are teachers of psychotherapy, but special training can be secured in this branch for a very moderate outlay and it is safe to say that any school in which the authorities are convinced of its value and determined to secure instruction in this branch for pupils, will find a way to get a teacher. The world war and the needs of the returned soldiers are emphasizing this branch of the therapeutic art as nothing else ever has done.

To distinguish between the teaching of arts and crafts, and the teaching of *occupations for invalids and convalescents from the standpoint of therapeutics*, is very necessary, and calls for careful observation and wise judgment. With the most vague ideas as to what the patient needs or even how to approach a patient, under the name of "patriotic service," amateurs are already coming into this field, and offering themselves for the tedious task of re-education of the invalid soldier.

There is no question that the need for workers in this field exists, and will increase, and the training schools should rise equal to this emergency, and provide a proper course of instruction, based on careful study of real patients of various types, from the indolent invalid who

never had to earn a dollar, to the hard working man or woman who can scarcely remember when he was not forced to carry the responsibility of earning a living.

"*Studies in Invalid Occupation.*"—This book by Miss Susan Tracy may well form a foundation for such a course. In the re-education of returned soldiers, expert craftsmen skilled in various industrial pursuits will be needed, and the nurse's part will probably be with convalescents and perhaps to serve as assistants to craftsmen, bringing to the task not only some knowledge of the craft, but an understanding mind, a clearer appreciation of the patient's condition and needs, than any ordinary industrial workers could possibly have. A physician[1] who has had many years of experience in applying the work cure to various types of invalids, issues a warning against the tendency to teach nurses a smattering of a few amusing occupations which may be well enough for convalescent children; he suggests that the nurse to be well equipped industrially must go into the work shops and work herself, side by side with the patients. The occupations taught to nurses must be real and legitimate, not foolish "fancy work."

A lecture course as an introduction to the book mentioned might be arranged as follows:

1. History of occupation-therapy. Its social significance. Economic value.

2. The occupation department in state hospitals; county infirmaries; general hospitals and sanitaria.

3. Re-education of returned soldiers in Canada, England, France, etc., methods and results.

4. How some of the crafts originated; what we have learned from the American Indian, pottery, basketry, bead work, weaving, etc.

[1] Dr. Hall in "The Work of Our Hands."

FIG. 16.—A class in basketry. Taunton State Hospital, Mass.

FIG. 17.—This is a class in lace making. The teacher is a *first-year* pupil, who has already had instruction in this one craft. Taunton State Hospital, Mass.

FIG. 18.—Making colonial mats for hot dishes. Taunton State Hospital, Mass.

FIG. 19.—A post-graduate class in leather work. Taunton State Hospital, Mass.

FIG. 20.—A lesson in brass work. Taunton State Hospital, Mass.

5. Problems relating to various types of infirm and handicapped patients.

6. Demonstration of methods in basketry, modelling and pottery, knitting by hand or machine, stuffed toys, lace making, chair caning, etc.

7. Out door occupations; horticulture, nature study, adaptation to various types of invalids. Precautions in cardiacs and tuberculosis patients.

Optional courses in the senior year dealing with two important branches of nursing—institutional economics, and public health nursing, allowing nurses at the beginning of the year to sign up for one course, but not for both, are possible in the majority of hospitals. There are two or three books which will serve admirably for the foundation of these courses, and the books are to be had at prices easily within reach of any school which desires to make its third year more valuable by introducing these two courses.

Official Relationship and Conduct or Hospital Courtesy. —As an introduction to the course in institutional economics a lecture or two on official relationship, or hospital courtesy seems very necessary. A great many head nurses fail in understanding their relationship to heads of other departments, in their respect for the authorities of the school, in general coöperation for the good of the whole institution. They overstep their province; they ignore the deference due to supervisors, and the courtesies due to those of their own rank. They are unwise in exercising the authority that is given them. They give way to jealousy and impatience. They place upon the superintendent or principal the constant necessity of carrying an oil can to calm troubled conditions and allay friction.

Another point where failure is often recorded is observed in the nurse who has learned to mechanically go around

in a rut in the hospital in which she was trained, and has seemed to be a success, but when taken out of the familiar environment and put in a different city in an institution with different arrangements she has made a serious failure. She knew, in a general way, how work was done in one hospital. She did not know the underlying principles of sound institutional government, nor how to adapt herself to different people, rules, and conditions. She had not been taught the points to observe and to avoid when assuming the responsibility of a new position. This kind of instruction the hospital school is clearly responsible for giving to a nurse, and its importance to her is hard to estimate. She can afford to have fewer lectures in some other subjects, if thereby time is secured for this kind of practical instruction in The Art of Getting Along With People—in Official Relationship and Conduct—spelt with capital letters.

The head nurse is expected to teach but, as a general rule, she has not been taught to teach. We have somehow expected the necessary teaching qualities to blossom out in her without cultivation, somewhere on the way from the training school to her first head nurse position. We have been disappointed, of course, because she didn't teach, and apparently didn't want to teach, and we have blamed her when we should have blamed the system under which she was trained, a system that often placed on her the burden of cramming a lot of non-essential matter, but omitted to give her instruction in some of the most important duties she would have to perform.

Should the Senior Nurse be given Head Nurse Responsibilities?—That depends on a number of conditions. If she is to be given head nurse responsibilities she should have some systematic and careful instruction in regard to the best way to measure up to the demands of such a position. In a great many hospitals—especially the

smaller institutions—where probably the staff of graduates consists of the superintendent, the operating room nurse and possibly one other graduate, the senior nurse is necessarily obliged to be in charge of juniors and probationers and of the practical work in the wards to a considerable extent. There are some advantages and some disadvantages in such an arrangement. Certainly the average senior nurse cannot be expected to do much bedside teaching of juniors, she has not the experience needed to discern where waste of effort and supplies is occurring, she cannot enforce discipline as an experienced graduate is expected to do. Yet some of the most successful hospital executives we have, got their first executive experience as senior nurses. They learned often through their mistakes and failures, the things to avoid and to be sure to observe.

Institutional Economics.—Considering that nurses are the chief sufferers if a building is badly planned from the standpoint of getting work done easily and quickly and without waste of time and energy, is it asking too much to suggest that nurses while in training, in the last year be given a few lectures on hospital planning and administration. Is it wise to perpetuate the system by which a nurse spends three years in a hospital and leaves it without any clear idea of the important principles that should guide in locating a hospital, of the points at which mistakes commonly occur that are going to be costly in the long run, and interfere with economy and efficiency, of the principles which underlie efficient institutional government. A young nurse superintendent appealed to the author for advice as to what to suggest to the architect who was to plan a new hospital building in a small city, the hospital having started in a large private dwelling house. "The board seems to think I know what kind of building we ought to have; they expect me

to confer with the architect and make suggestions, and I don't know the first thing about it, except that a hospital should have plenty of light and air," she wrote. There are hundreds of nurses who have been in the same difficult position. They went from their training school into a head nurse's position, and from that to a superintendent's position, but in their whole hospital experience, covering possibly six to seven years, they had never had a lecture given them in regard to the building in which the best working years of their lives were being spent.

Even one lecture on common mistakes in hospital planning would have been a wonderful help—would have opened their eyes to see things they had not observed before, and would have saved many hundreds of dollars to some institution which later employed them. Considering that hospitals are the most expensive of all forms of philanthropy to maintain, that local architects who have had no experience in planning hospitals are commonly employed in the building of hospitals especially in smaller places, and that *nurses* are the individuals who are expected to manage such hospitals so as to produce the best results, any measure that can be used to disseminate a knowledge of how to avoid mistakes, how to plan so as to save labor, etc., is certain to be useful to some of the class later on, in unexpected ways and places.

Study Carefully the Details of Each Room in a Hospital.—A writer in discussing the importance of carefully considering the details of each room, in hospital planning, and of taking nothing for granted—of planning the hospital *before it is built*, instead of making it over after, asks the following questions which illustrate some of the practical points which such a lecture should include:

"Why is this window a wide one and this one a narrow one? Do they serve their purpose by being such

a width? Why is there an arch in the hall? Why is this door too narrow to take a bed through it? Why is the most-used piece of equipment located in a corner? Why do two doors clash? Why is there no place in the serving kitchen for a refrigerator? Why is the dish-washing sink set so low that anyone but a dwarf has to bend all the time she works at it? Why couldn't the clerk find a place to keep the office supplies? Why have the nurses no place to dress for the operating room? Why wasn't the nurses' desk near a light either by day or by night? Why was there no sterile water for the delivery room? Why do nurses have to waste so many steps in getting clean linen? Why is there no water near the medicine closet? Why was no place provided in which to keep brooms and cleaning appliances? Why —but every reader is thinking of a hundred other whys in connection with the many and glaring evidences of incompetency in the planning of hospitals.

The outline for a course in institutional economics might be arranged somewhat as follows, with the fact always in view that some nurses will be fortunate or unfortunate enough to become hospital superintendents after they have had experience as head nurses, instructors or principals:

1. Choosing the hospital site. Need of providing room for expansion. Advantages and disadvantages of sites in the city and in suburbs. Types of building—cottage hospitals, multi-storied buildings, pavilion hospitals, etc. Mistakes to avoid in hospital planning. (See Chapter V by Dr. Brown and Mr. Stevens in the book "Hospital Management.")

2. Hospital organization—board of managers, superintendent—duties of heads of various departments. Their relation to the whole institution.

3. Furnishing the hospital—wards, kitchen, operating

rooms, what to do, what to avoid in general, in each department. Need of knowing where each appliance is to go and whether it will fit the space.

4. The hospital income. Hospital bookkeeping.

5. The dietary department—practical points on management of kitchen, store room, diet-kitchen, etc.

6. The engineering department—what a head nurse needs to know about heating, ventilation, plumbing, etc.

7. The laundry—its cost, its management.

8. The purchase and economical use of hospital drugs and supplies. Methods of conservation.

9. The training school and its management. Its development as a department of the hospital—as a separate organization: its cost, its obligations, its officers, general plans and problems.

10. Arranging the course of study. Teachers and teaching.

11. Some principles and methods of teaching—lectures, recitations, demonstrations, quiz classes, etc.

12. The art of questioning.

13. Repetition, reviews, examinations, reports.

14. The place of the head nurse in the training school. Qualities that make for efficiency. Beginning to work in a new hospital. Precautions to be observed.

15. The head nurse's responsibility for bedside teaching. Methods to be used in bedside teaching.

16. The responsibility and duties of the night supervisor.

17. The chief surgical nurse. Her qualifications, her responsibility for teaching. Methods of organizing operating room work.

18. What a pupil nurse should be expected to be taught while in the operating room.

19. Ethics and discipline as they relate to the head nurse.

20. The efficient head nurse—a general discussion of important points that make for efficiency.

The first four or five chapters in this outline can be handled by almost any wideawake superintendent of a hospital who has a few years of experience to his (or her) credit, or a hospital architect might be called in for parts of the course. The foundation for the first nine lectures can be found in the book "Hospital Management" to the making of which a score of experienced hospital executives contributed.

The remainder of the course can be handled by the principal herself with such assistants as she may choose. Some of it can be covered in the course on ethics.

Public Health Nursing.—For the other group—the group of students who signed up for the course on Principles of Public Health Nursing, take Miss Gardner's book "Public Health Nursing" as a basis, and get the most capable and enthusiastic visiting nurse to help with the course. Follow in a general way the outline of that book which includes the following:

History of the public health nursing movement.

Fundamental principles in public health work.

Modern problems.

Public health nursing from the nurse's point of view.

How to organize a visiting nurse association.

The board of managers. The superintendent of nurses. The staff nurses.

The nurse working alone.

The pupil nurse. Methods of organization and administration.

The last section of the book deals with special branches of public health nursing—tuberculosis, child welfare, school nursing, etc.

Once the training school superintendents and principals decide to re-arrange their third year instruction so as to

better meet *their own pressing every-day needs*, the needs of nursing, and of the age in which we live, we will hear less frequently the complaint that "good head nurses are hard to find," for we will have adopted the sensible principle which business firms long ago adopted, of teaching the principles of administration, of giving instruction in the things they were expected to know. We shall have adopted the very practical method of cultivating the qualities we desire in head nurses—*of helping them in all possible ways to become the type of worker we wish and expect them to be.* Factories, stores, and business firms have for years adopted the plan of conducting training classes for executives. It paid them to do it. If we can't improve on their plans, let us meekly follow them.

The Smaller Hospital and Institutional Training.—The idea prevails that successful institutional nurses are to be secured mostly from the large hospitals. It would surprise many could they know how many of the successful superintendents and principals to-day received their training in hospitals of fifty beds or less. The proportion of nurses who make good as institutional nurses is probably as large in small schools as in large institutions. Just as surely as that ability is not a matter of sex, just so surely is it true that ability in institutional nurses is not dependent on the size of the institution in which a nurse received her training. It is largely dependent on the native qualities the nurse brought with her, the responsibility she has had to assume, and the ideals that were put before her during her training. The influence of a wise capable woman at the head of a school far outweighs in its effect on pupils, the number of beds or the style or equipment of the building.

CHAPTER XV

Examinations, Records, and Reports

Examinations are generally admitted to be necessary in all educational institutions, even though there are times when one might feel justified, in a hospital, in classing them among the "necessary evils" of life. If the questions were asked, "What is your object in arranging for this examination of this class of nurses? What do you expect to accomplish by it?" the answer would probably be, "It is a test of the fitness of the nurse to go on with the course, or of her general proficiency, of her ability to undertake more difficult work, or to determine wherein she is weak or deficient."

However valuable or satisfactory the written test may be in ordinary educational institutions, it is certainly far from being the best test in a hospital training school. A nurse might be able to write perfectly the theory of bed-making, and yet never keep the beds in her ward looking neat and trim. Like the professor at the skating-rink, she might be "up in theory, but down in practice." She might know all the methods of preventing bed-sores, and yet neglect to watch for their approach. She might be thoroughly versed in the rules for the administration of medicines, and yet be very careless in handling them. She might know all the facts that are known about sepsis and asepsis, and yet be a very indifferent surgical or obstetric nurse.

That a nurse should be able to cram her mind with the facts concerning any subject, and take a high grade in theory, is of far less importance than that she should have

proved herself strong and careful in the daily routine. The real work is a far more valuable test than the telling of it. The nurse's improvement in it, and the result of frequent reviews, is a truer test than any written examination, however thoroughly and fairly conducted. What the nurses can do, how steadily and resourcefully they can meet emergencies and manage difficult situations, their ability to get on with disagreeable people, their every-day faithfulness and accuracy, are of far more value in determining their fitness to hold a diploma than their telling or writing what they would do under certain circumstances could possibly be.

Perhaps the greatest value of the written examination is the fixing of the subject in the pupil's mind and the discovery of weak points. This latter is often only an inability to express the knowledge possessed in proper form. The greatest benefit of examinations is only realized when the ground covered in examinations is thoroughly reviewed in class. Then the character and value and weak points of the answers can be clearly shown.

The proper fair grading of a paper, the fixing of the value of each answer, or part of an answer, is not an easy matter. Before attempting to grade a paper, an examiner should have some general system of weighing an answer and determining its value.

What are the elements of a good answer? An answer to be called good must, first of all, show thought. Random, haphazard answers deserve little credit even if they almost hit the mark. A good answer will show clearness of expression. Ambiguity will be guarded against. In a good answer all that is asked will be given, but nothing more. A good answer will bear the mark of a correct interpretation of the question; this results from giving careful thought to each question before attempting to answer it. The reason for failure at this

point can often be traced to the fact that the student did not take time properly to grasp the point. Good arrangement always characterizes a good answer. Many answers admit of clear, methodic arrangement. It is the student's business to see these opportunities and use them. A good answer will give evidence of a proper appreciation of time, space, and words, and economy will be exercised in the use of all three. It is a common failing to give more than is asked for, because the student cannot give enough of what is demanded. While this failing should be discouraged, it is unfair to reject as worthless any answer that contains even a small fraction of truth. Partial answers deserve partial credit. To sum up: The good answer must show thought, clearness of expression, correct interpretation, good arrangement, economy of time, space, and language. The answers that deserve no credit are those which show flippancy, thoughtless haste, guesses, and incorrect ideas concerning the subject.

General Rules.—With each class some instruction as to how to arrange their answers, how and where to affix their signatures, how to fold papers—general rules—must be given. These instructions might read similar to the following:

Candidates will write on one side of the paper only.

The number of the question and not the question itself must be given.

Questions need not be answered in the exact order in which they are written, but must be numbered exactly as in the question paper, each subdivision being correctly indicated.

A line or space must be left between each question. Subdivisions must always be started on a new line. An inch space must be left at the left side of the paper.

New questions must not be started at the bottom of the page.

Hartford Hospital Training School for Nurses

Ward	PRACTICAL EXPERIENCE	1 yr.	2 yr.	3 yr.	Total
1	Private Rooms and Operating Room				
2	Men's Surgical Ward				
3	Men's Medical Ward and Private Rooms				
4	Women's Medical Ward				
5	Men's Med. and Surg. Ward—Operating Room, Clinic,				
	Plaster Room and Salvarsan Room				
6	Gynecological Ward and Operating Room				
7	Obstetrical Ward and Nursery				
8	Women's Surgical and Orthopedic Ward				
9	Children's Ward				
10	Women's Ward and Observation Rooms				
11 & 12	Private Corridor and Rush Cheney Eye Ward				
	Private Pavilion				
14	Wildwood Sanatorium				
16	Hartford Isolation Hospital				
	Diet Kitchen				
	General Operating Room				
	Head Nurse				
	Anaesthesia				
	Special Nurse				
	Assistant Night Supervisor				
	Vacation				
	Illness				

MONTHLY WARD REPORT	1 yr.	2 yr.	3 yr.	Total
Punctuality				
Neatness				
Economy				
Powers of Observation				
Personality				
Conduct				
General Attention and Kindness to Patient				
Management				
Reliability				
Tact				
Average Theoretical Work				
Average Practical Work				
General Average				
Number Pupils in Class				
Rank in Class				

Name Address Age

Education

Previous employment Religion

Date of entering school Date of leaving school

Post-graduate of

Registered in State of

Married name and address

	LECTURES				CLASSES				
	1 yr.	2 yr.	3 yr.	Rating	1 yr.	2 yr.	3 yr.	Total Number	Remarks:
Anatomy and Physiology									
Hygiene									
Bacteriology									
Dietetics									
Materia Medica									
Urinalysis									
Medical Nursing									
Surgical "									
Obstetrical "									
Pediatrics									
Mental Diseases									
Massage									
Eye and Ear									
Nose and Throat									
Diseases of Skin									
Venereal Diseases									
Anaesthesia									
Orthopedics									
Tuberculosis									
Practical Nursing									
Records and Charting									
Radiology									
Ethics									
Gynecology									
									Superintendent of Training School

FIG. 21.

Each page must be numbered in the right-hand corner.

Papers must be folded lengthwise.

Candidates will please be prompt in reporting for examination and will bring with them pen, ink, blotter, and eraser.

In a considerable number of high schools there has been noted a very decided tendency to lessen the number of formal examinations and to grade the pupil on the results shown in recitations and ordinary class work. Pupils who show in class that they have mastered a subject or are fairly proficient, who reach a certain percentage, are not required to take further examinations at the end of the course. As an actual test of the student's knowledge this system seems much fairer than the examination tests as ordinarily conducted. The adoption of such a system however, presupposes the existence of an accurate well understood system of grading and class records, showing the number of recitations and classes actually attended by each student and the proficiency shown. Such a system of records and such conditions as will make the class work a fair test of the knowledge acquired by a pupil are not found in every hospital, nor is there any probability that these will soon come into general use. The problem of how best to arrange for the proper carrying on of the practical work in the wards and operating rooms, night and day, and also arrange so that each pupil will be able to attend the classes that are provided for her division—is easier solved on paper than in reality.

The difficulty in regard to full accurate records is felt much more keenly in the smaller hospitals where often the superintendent of the hospital is also principal of the training school—where often one lone woman has to take the brunt of every important difficulty that presents itself, and the time she has for strictly secretarial work is

decidedly limited. Standard set of blanks which have been carefully worked out and which seem to meet all the requirements in regard to the pupil's qualifications and experience previous to entrance, and clear through to graduation, have been rejected even in larger schools, with the statement that they were so elaborate it would be necessary to employ a bookkeeper to do nothing but keep training school records, and the hospital did not provide an individual for that purpose. There must be, however, and there is a "happy medium" in regard to records of pupils, to which every hospital should be willing to conform.

The minimum of records apart from the information called for on the admission blanks should provide for a day book showing the number of days the pupil was on duty each month, and in what ward or department; the attendance at the different classes; the average grade attained in practical work and theory each year, with sufficient comment on general deportment and efficiency to enable a stranger who never saw the pupil, to arrive at a fairly just conclusion as to her capability and desirability as a nurse. This amount of records should not be burdensome to any school, and it is only a matter of justice to a student to leave such permanent records in the school that definite information can be given when requested.

The custom of requiring the pupil herself to keep a record of the practical methods which she has been taught, has become more and more general—this in addition to the records kept by the school. That a pupil should have spent two or three years in a hospital where abundant opportunities existed for her to become proficient in every practical duty a nurse would ordinarily be called on to perform, and have gone out from the school without having learned how to do certain things which she ought

Hartford Hospital Training School for Nurses

PRACTICAL WORK CARD

Name_____ Year

	Class Room	Pupil Dem.	1	2	3
Care of Room or Ward					
Care of Service Room, Bath, Toilet					
Dusting, Sweeping, Waxing					
Care of Linen Room					
Serving Meals					
Feeding Helpless Patients					
Tight Bed					
Convalescent Bed					
Ether Bed					
Bed with Patient in it					
Care of Bed and Bedding					
Disinfection of Bed					
Admitting Patient					
Care of Clothing and Valuables					
Entrance Bath					
Bed Bath and Toilet					
Morning Toilet					
Assisting with Tub Bath					
Combing Tangled Hair					
Moving and Lifting Patient in Bed					
Moving and Lifting Patient to Chair					
Moving and Lifting Patient to Stretcher					
Use of Pillows, Pads, Air Cushions					
Use of Backrest, Cradle, Knee Ro					
Special Care of Mouth and Back					
Preparation for the Night					
Abdominal Binder					
T Binder					
Knee and Ankle Straps					
Washing the Hair					
Preparation for Physical Examination					
Preparation of Specimens					
Temperature, Pulse and Respirations					
Care of Rubber Goods					
Solutions					
Sponge Bath					
Typhoid Tub Bath					
Typhoid Slush Bath					
Alcohol Rub					

Entered_____ Year

	Class Room	Pupil Dem.	1	2	3
Cold Pack for Temperature					
Cold Pack, Sedative					
Hot Pack, Moist					
Electric Bath					
Sterilization and care of Instruments					
Disinfection of Excreta					
Disinfection of Clothing					
Hot Application to Eyes					
Cold Application to Eyes					
Application of Turpentine Stupes					
Application of Chloroform Liniment					
Application of Cold Compresses					
Foot Bath					
Mustard Poultice—Plaster Leaf					
Flaxseed Poultice					
Getting Patient Ready for Operating Room					
Specializing Patient under Anaesthetic					
Adjusting Bedpan					
Care of Head with Pediculi					
S. S. Enema					
Nutritive Enema					
Oil Enema					
Starch Enema					
M. G. W. Enema					
Shock Enema					
Enteroclysis					
Colon Irrigation					
Vaginal Douche					
Hypodermic Injections					
Catheterization					
Catheterization for Specimen					
Bladder Irrigation					
Medical Asepsis					
Preparation for Night Duty					
Ice Cap					
Test Meals					
Belladonna Plaster					
Cantharides Plaster					
Antiphlogistine Plaster					

	Class Room	Pupil Dem.	Year				Class Room	Pupil Dem.	Year		
Tincture Iodine						Murphy Drip					
Eye Irrigation						Nasal Feeding					
Ear Irrigation						Injection of Mercury Salicylate					
Reading Doctors' Order Books						Carrel-Dakin Irrigation of Wound					
Massage						Post-Op. Care of Sphincter Cases					
Preparation for giving Antitoxin						Method of Making Iodoform Gauze					
Renal Function Test						Use of Lung Motor					
Plaster Bandages						Obstetrical Positions					
Plaster Room Technique						Breast Binder for Support					
Care After Death						Breast Binder for Drying Milk					
Charting						Breast Massage					
Use of Cautery						Hot Fomentations for Engorged Breasts					
Shaving Patient for Operation						Bathing and Care of New Born Baby					
Stomach Lavage						Rectal Irrigation for Baby					
Stomach Gavage						Care of Premature Babies					
Giving Medicines						Care of Bottles and Nipples					
Inhalations						Making Mixtures for Babies					
Croup Tent						Administration of Oxygen					
Surgical Technique											
Surgical Dressings											
Preparation for Phlebotomy											
Preparation for Blood Culture											
Preparation for Lumbar Puncture											
Preparation for Wasserman											
Preparation for Hypodermoclysis											
Preparation for Salvarsan											
Preparation for Paracentesis											
Preparation for Pneumothorax											
Cupping											
Number Obstetrical cases seen											
Cataract Dressings											
Preparation for Cataract Operation											
Application of Eye Bandage											
Nasal Irrigation											
Baby's Bath											
Care of Breasts											
Washing Flannels											
Specimen Urine from Baby											
Artificial Respirations											
Orthopedic Appliances											
Bandaging											
Bradford Frame											
Buck's Extension											
Splints											
Fracture Board											

FIG. 22.

to have learned, has frequently been as much the fault of the pupil as the school. No one intended it to happen, but through an oversight it did happen, and the nurse and the patient—not the school—were the losers thereby. New methods are constantly being worked out. Some methods taught to-day will be obsolete five years hence, but there is a certain generally accepted list of duties which every nurse should be proficient in, when she leaves a training school. She should be made to understand that she has herself largely to blame, if, when opportunities for learning were all around her, she did not make her lack of proficiency known. She should be made to carry a certain responsibility for acquiring the knowledge she needed, even if definite plans were not made for it in the daily routine.

A casework record in which the pupil keeps for herself a list of the different kinds of diseases she has come in contact with, the different types of cases she has nursed, is a valuable bit of work to require of every nurse every month.

Efficiency Record

.....Hospital School of Nursing. Entered.....
Nurse Miss..... Finished Course.....

Personality .....
Conscientiousness
General disposition and temper
Kindness
Reliability
Resourcefulness
Adaptability
Courtesy to those in authority
to patients
to associates
Enthusiasm
Neatness
Teachableness
Keenness

Initiative
Loyalty
General spirit of service
Remarks.....

Professional Fitness

Accuracy
Punctuality
Ability to carry responsibility
Memory
System in work
Rapidity
Neatness
Diligence
Judgment
Tact
Economy
Observing powers
Loyalty
General interest in work
Nursing Instinct

Qualifying Remarks.—If it is desired, on the opposite side of the efficiency record card may be listed such qualifying records as the following:

Good health and appearance	Uncertain health
Intelligence	Lacking in ambition
Executive ability	Too aggressive
Professional ambition	Antagonizes people
Team work	Resents correction
Effect on associates	Nervous
Cheerfulness and sense of humor	Diffident
Unselfishness	Unobliging
Excels in.....	Unpunctual
Remarks.	Inclined to be careless
	Lacking in tact and judgment
	Selfish
	Unwilling to sacrifice
	Insincere
	Unable to control tongue
	Uncertain temper
	Lacking in self-control
	Mentally lazy

Points which apply to the candidate should be underscored.

Hospital School of Nursing—Practice Record

NURSE.....

Entered..... .....

To the Pupil Nurse:

Have you received proper and thorough practical instruction in the following procedures? Do you consider yourself adequately trained to carry out any or all of the items listed? Entry of date in proper column opposite each item will be considered an affirmative answer for that item.

Before pupil nurse completes her course in Hospital this sheet is to be handed her for final checking and if checked affirmatively throughout, is to be signed by the nurse and filed.

Bed making, various types		Hypodermic Injection	
Preparation of Operation beds		Hypodermoclysis	
" Rheumatism "		Continuous Salines	
Lifting of patients and care of Backs		Aspiration and Tapping	
Management of Patients after Operation		Preparing & Cleansing of Syringe & Needle	
Scrubbing and Cleaning Mackintoshes		Bladder Washing	
Filling Hot Water Bottles and Water Pillows, Care of rubber goods		Passing of Catheter	
Receiving New Patients		Cleaning "	
Case taking		Treatment and Nursing of Acute Cases	
Giving and Receiving Reports		Treatment and Nursing of Typhoid and Infectious Cases	
Bathing in Bed			
" " Bath Room			
Combing and Washing Heads		Douches	
Care of Hands and Feet		Bathing and Dressing of Eyes	
Temperature, Pulse and Respiration		Syringing of Ears	
Charting		Making of Bandages	
Reading of Medicine Cards		Bandaging	
Administration of Medicines		Splint Padding	
Sponging		Application of Splints	
Hot and Cold Packs		Extensions and Plasters	
Hot Air Bath		Dressings	
Foot Bath		Preparation of Skin for Operation	
Steam Kettles			
Poultices		Shaving	
Fomentations		Instruments (1) Sterilizing	
Ice-bags		(2) Cleaning & Keeping in order	
Cupping			
Blisters, Mustard Leaves, Leeches		Preparing and Serving Meals	
Preparation of Stomach Wash		Care and Feeding of Infants	
Nasal and Oesophageal Feeds		Observation of Stools	
Enema (1) Purgative		Testing of Urine	
(2) Saline		Care after death	
(3) Nutritive colonic irrigation		Preparation of specimens for laboratory	
Preparation of solutions			
Disinfection of excreta		Preparation for lumbar puncture	
" " clothing		" "for intravenous infusion	
Sterilization of sick-room utensils		Special work.	
Preparation of patients for examination - Chest			
abdominal			
gynecologic			
Use and care of cautery			
Preparations for anesthesia,			
Administration of oxygen.			

The *report of the training school* should form an interesting and important part of the annual report of the hospital. In a great many schools this report consists of a page or two of dry figures about the number of nurses, to which is appended such stereotyped phrases as "The general health of the nursing staff has been good" or "Thanks are hereby tendered to the staff of lecturers for their valuable services." These statements are good but they do not tell the whole story, or half of it—neither do the figures.

There is no real standard for such a report and the training school superintendent who has to prepare one for the first time may properly feel somewhat "at sea" as to what to state and what to omit. If accurate records have not been kept, her difficulty is increased. A consideration of many such reports till one is found that seems to be a fairly good model is helpful, but not always convenient. In the absence of any standard or guide the following schedule of items to be included, may be helpful as a guide to the amateur.

1. A list of the officers, resident instructors, and supervisors—or the faculty.

2. The number of applications received during the year from candidates who wished to enter the training school.

3. How many were accepted on probation—how many rejected.

4. Present number of pupils.

5. The total number of nurses who make up the staff as compared with the same data for the previous year.

6. If additions have been made, reductions or promotions, these should be noted. Vacancies occurring should also be noted with the reasons for leaving.

7. The health of the nurses may be reported briefly—with special mention of operations or epidemics, or very serious illnesses or deaths.

8. The matter of the housing of the nursing staff, additions or alterations needed.

9. The period of training. Special mention should be made of important alterations or additions in the course of training.

10. If prizes are given for excellence or proficiency, mention should be made of nurses who have distinguished themselves by prize winning.

11. If any position of special distinction has been attained during the year by a graduate or former member of the staff this item might be included.

12. A point specially well worth mentioning is the length of service of executives or employees holding permanent positions.

Where the paid officials of a hospital or school are constantly changing, there will usually be found conditions which account for it. When heads of departments and paid employees remain in the service of the institution year after year, it tells a story of happiness and contentment, which in these days of unrest and desire to change, is a good recommendation for the institution.

13. Interesting incidents, unusual happenings, new methods in the school, inventive genius shown by any member of the school, progress toward uniformity or standardization in any department are all worthy of note.

The good work of a school is so dependent on reasonable hours of work, and good opportunities for recreation, that a paragraph may wisely be devoted to this phase of the school life and work.

FOR DISCUSSION

1. What are the chief values of written examinations in a nurse's course?

2. In grading pupils each year what percentage should be allowed

for personality and general deportment? What for nursing practice and what for the theory of nursing?

3. Show why in order to do justice to each pupil it is necessary to grade on all three points.

4. Mention some difficulties which enter into a system of grading on lectures and class recitations in a training school.

5. Show why a system of records covering the work of the nurse from probation to graduation is a necessity and mention the items in such records as of chief importance.

6. To what extent should a nurse be held responsible for keeping records for herself while in training.

7. Outline the important items which should be included in a training school report.

SECTION 2

THE HEAD NURSE

CHAPTER XVI

Choosing the Head Nurse

The work of a hospital or training school whatever its size calls for some degree of organization. If efficient service is to be rendered it must be divided into departments each of whom must have some responsible person in charge.

By the term "head nurse" is meant the institutional nurse who is placed in charge of a ward or department and who has the direction of one or more other nurses. The term "hospital sister" so common in England, has practically the same application. The position has proven one of the stepping stones toward the more responsible position of superintendent of a hospital or principal of a school for nurses.

The first requirement in a head nurse is that she be a good model for pupil nurses to copy. Most of the education which nurses receive while in training comes in one of three ways—by listening to others, by watching and copying others, and by experience. The intimate daily contact which the head nurse has with pupil nurses, prolonged over a period of two to three years is certain to count largely in the making of the product of the school. Study the nurse at the head of a department critically, with a view to deciding what the pupil nurses will learn by being with her, and by watching and copying her.

The Head Nurse is a Trainer and Teacher.—Whether her ambitions are low or high, whether her character stands out in clear outline, revealing her as a thoroughly honest and reliable woman, whose example may safely be followed, or whether she brings into the school such elements as deceit, disloyalty, jealousy, untruthfulness, cynicism, constant criticism or fault finding, we may expect a good crop of these same qualities in the pupils.

It makes little difference how many schools or universities a candidate may have graduated from, or how many diplomas she may carry, if she isn't a good model for pupil nurses to copy she is certain to be a detriment to an institution.

An enumeration of the qualities desired in a head nurse of a department when looked at in print may seem like a description of the qualities one would expect to find in an angel, but, in reality, they are about the same combination of qualities one finds in a successful business woman or a successful professional woman of any class.

The head worker of the social service department of a large hospital received one morning a long distance telephone call from a man in another state, who wanted her to secure for him, or tell him where to find an experienced nurse for social service in a small city. He mentioned that he wanted a woman of good judgment, tact, with a proper regard for appearance, not easily discouraged, able to take the initiative in developing social service in that city, able to direct others. He did not care whether she had any social training or not if she had the personal qualities mentioned. What he wanted really was a practical well-balanced sensible woman with a nurse's training, with a capacity for meeting emergencies of one sort or another, and dealing with them successfully. Ask the general manager of any large business firm where many women are employed, the kind of heads of depart-

ments he is employing as far as possible, and the list of qualifications will not be greatly different from those specified for social service. Ask the hospital superintendent of any experience the kind of qualities he wants in a ward head nurse, and they will be much the same as for the social service worker. He may add a few others that he considers desirable or important, but he will be very apt to include the qualities described for the social service worker.

In a large degree the qualities that make for success in a head nurse are the native qualities that she brought with her to the school, or that were bred into her before her training school days. We are reminded every little while that if we had higher educational qualifications for hospital schools we would have no difficulty in securing the type of head nurses and institutional workers needed. But the facts are that in few if any lines of activity are there enough of such workers to fill all the places needing them. A college education is certainly a thing to be desired, but no college seems to be able to give a woman common sense, good judgment and the ability to work harmoniously with different sorts of people, if she had not a well balanced character and disposition to start with.

Wanted—Sensible Women.—When we are through analyzing the qualities mentioned as desirable, we will have to admit that neither brilliancy nor superior education count half as much in real success as does just plain ordinary common sense. Sensible women have a remarkable capacity for rising equal to emergencies, and of adapting their philosophy and theories if they happen to have any, to the conditions in which they find themselves.

Discovering Head Nurse Material.—In every class of any size one is fairly certain to find a few young women

with the ability, latent perhaps, to effectively carry responsibility and direct others. It is to the interest of hospitals and training schools to discover and develop this type of nurse in every way possible, and to give all possible encouragement to nurses who seem to have these desired qualifications to specialize on executive work.

In most classes the majority of the pupils will have many of the right qualities, but they are by nature too dependent on others, they do not possess the qualities to the degree necessary for success; they have not the strength of character to enable them to meet effectively the responsibilities of the head nurse's position, however much they may desire it. Some nurses make excellent assistants who would fail if called on to assume the executive's place, they make splendid lieutenants but poor captains. Fortunately there is urgent need for capable assistants or good lieutenants in institutional life. All cannot have the positions of greatest responsibility. Some will require longer to develop into the kind of executives needed, but eventually they will make good.

An important point for hospital superintendents and principals to remember is that, as a rule, one does not find such workers waiting to be picked up. If they are through with their training they are at work somewhere, because they have the personal qualities that make them valuable. If they are to be developed in sufficient numbers, the hospital schools must put forth more effort to give some special training to those who have within them the possibilities of becoming good head nurses and instructors. Ninety-five out of every hundred head nurses will not be able to get any special training for such work except that which they acquire in a hospital —either before or after the training period.

Studying the Individual.—In a certain large banking concern which has over fourteen hundred employees, the

heads of the firm have devised a system of judging men. They receive applications at the rate of over fifty a day. A third do not warrant consideration at all. The other applicants are given a carefully prepared questionnaire to fill out. If the applicant looks promising his information blank is checked up and investigated. All applicants for whatever position are judged and rated in regard to:

1. "Appearance and manner. How does the applicant impress people—physique, facial expression, clothing, neatness, voice, self-confidence, courtesy.

2. "Initiative and self-reliance. Note whether he has the ability to see things to be done, or to start things without being shown or told, and his self-dependence after having once been shown his work or given a task.

3. "Industry. Judge his energy and perseverance. Base your judgment on his personal history-sheet or application blank, all reports, and from the impression gained from contact with him."[1]

Character. Judge character, having in mind ambition, honesty, thrift, loyalty, spirit of service, and freedom from bad habits or disagreeable or vicious practices.

Personal history. Consider reports from previous employers and from any other sources, both the content of the reports and the reliability of the sources.

General impression—all things considered.

After the interview comes a series of scientific tests on concentration, imaginative powers, mental alertness, mental capacity.

For the head of a department in this institution the chief requisites are:

Keen sense of justice	Courtesy
Sympathy	Teachableness
Tactfulness	Knowledge of human nature

[1] American Magazine.

The man whose business it is to secure new business for the firm should have:

Tact	Optimism
Courtesy	Self-confidence
Verbal expression	Knowledge of human nature
Personality	

Moreover, the institution attaches tremendous importance to the educational progress of its employees. From the moment an applicant enters as a page boy he must attend classes, and his progress is very materially influenced by his study record. The percentage of employees attending educational classes runs as high as seventy. There are no fewer than forty-eight classes covering nineteen subjects taught by twenty-five teachers.

Enthusiasm and Initiative.—First among the qualities which this bank requires in an employee is enthusiasm. If he isn't an enthusiastic worker he is not likely to have the next important qualification—initiative.

Whether a nurse is being considered for the position of head nurse of a ward, or pavilion, or operating room, or dispensary, or as an assistant in the principal's office—these two qualities, enthusiasm and initiative should be sought for.

"Enthusiasm is the chief element of success in everything. It is the light that leads, and the strength that lifts the worker on and up in the great struggles of the scientific pursuits, and of professional labor. It robs endurance of difficulty, and makes a pleasure of duty."

The twelve qualities that are regarded as most important for an employee of a bank do not differ greatly from those required in head nurses. Consider the following list and note that they are chiefly the personal qualities that

make the difference between a satisfactory and unsatisfactory employee.

1. Enthusiastic worker.
2. Exceptional aptitude.
3. Trustworthy.
4. Exceptionally accurate.
5. Tactful.
6. Exceptionally rapid.
7. Gives excellent coöperation with authorities.
8. Pleasing address and personality.
9. Poise or proper amount of self-confidence.
10. Marked executive ability.
11. Unusual degree of initiative.
12. Courteous always.

Getting the nurse to choose to do institutional work is an important part of the task of choosing head nurses. It is always a two-sided choice.

The demand for good head nurses and institutional nurses in general, should be called to the attention of nurses especially during the second and third years of training. One difficulty that is always to be expected is that the average nurse has no very clearly defined idea of what she wants to do—which branch of nursing she wishes to follow. A great many nurses who afterward return to institutional work are perfectly sure, while in training, that whatever else they may do, they do not want an institutional position. Far-off fields look green. Other lines of work seem to offer greater liberty or larger remuneration. It is usually a good thing for a nurse to get some experience as a private nurse even though she later returns to institutional nursing, as many do, but it is desirable that she have the advantages of institutional work presented to her at different times during training. It is desirable that she get the ambition aroused to make the best possible preparation for some

special line of nursing—the wholesome desire to excel in some one thing. There are altogether too many nurses who never seem to get into just the place where they can be contented and do their best work. They have not definitely made choice of some branch of the work, and used the means within their reach of fitting themselves to do well in their chosen line. In every line of work one finds square pegs in round holes—workers who do not fit, and who never reach any great degree of success. Many individuals spend half a lifetime trying to find out what they are best fitted for. There may be a score of positions which a nurse can fill with considerable success, but there are always one or two things which she can do better than others, or for which she seems to have some special aptitude. To help a pupil nurse to discover the thing which she can do best, to give the word of direction or encouragement that will help her to choose wisely, is one of the greatest services that can be rendered to a nurse.

Among the advantages of an institutional position may be mentioned the following: 1. A kind of service in which there is constant opportunity for a nurse to progress and a stimulus to do her best work.

2. Definite responsibility which tests ability, but which is always shared by others.

3. Congenial association and work which in itself helps to keep one from growing rusty. Every day she may see the latest scientific methods applied in the treatment of disease.

4. Regular hours of duty with no time lost in waiting for calls.

5. Regular salary and fewer expenses than most women workers have.

6. A vacation without loss of pay.

7. Usually fairly comfortable living quarters.

8. Opportunity for advancement.

To the ambitious young woman the last item is probably the most important. The hospital field is constantly growing. New institutional positions are being created every year in considerable numbers and the head nurse who has made a good record for herself is in line for promotion to a higher position.

There is another advantage in institutional work that is seldom spoken of—as compared with private nursing. The years of experience which she has to her credit are an advantage, whereas in private nursing they are after the first four or five years, a disadvantage. New drugs, new disinfectants, new appliances, new treatments and methods are constantly being evolved, and if the private nurse has not kept up-to-date by going back into a hospital for a short period every few years, she soon grows rusty. She finds the physician choosing the younger nurse fresh from the training school—not because she is more wise or capable, but because she is more up-to-date, and makes a more flexible or adaptable assistant. Whether this condition will always be so, time will tell, but there are too many living proofs of this condition to make it wise to overlook this point in directing nurses along vocational lines.

Should the Head Nurse be Chosen from the School in Which She Trained?—There are some advantages in following this course, that are obvious. The disadvantages are not so clearly seen. In starting a new work, the superintendent or principal usually finds her difficulties lessened if she has for a head nurse or assistant one who fully understands her methods, and of whose loyalty she is certain. Where a number of head nurses are employed there are advantages in having some of the positions filled by graduates of other schools. There is no institution whose way of doing everything is the best way—no hospital which has not something to learn from others.

A superintendent who had had many years of experience with head nurses, adopted the policy of filling the positions largely with their own graduates, but no graduate was eligible for such a position who had not had at least six months' experience in some other hospital. Careful observation had shown that the nurse who had had even six months' experience in some other hospital, came back a better-balanced broader-minded woman. She had been long enough away to get rid of any doubts or petty conceit she might have had about her own training. She had discovered that other hospitals had difficulties quite as serious as any she had experienced in training school days. She brought back a diversity of method, a wider outlook, a more tolerant spirit and was in a variety of ways a better example and leader for pupil nurses.

There are four common failings, to which head nurses seem peculiarly liable which should be watched for and guarded against in choosing a head nurse and giving her authority over pupil nurses. These are gossiping, favoritism, unprofessional conduct, and lack of respect for authority. Gossiping and favoritism are faults which usually flourish together. Unprofessional conduct while on duty, lowers the whole tone of the school in spite of all that a principal can do. Lack of respect for authority or a wrong attitude toward the authorities and rules of the school makes proper discipline a matter of great difficulty and creates an atmosphere of distrust, if not antagonism which is fatal to institutional harmony and a decided hindrance to efficient service. Knowing how to harmoniously work under, and with other people and how to wisely use the authority given her is one of the most important qualifications that a head nurse can bring to any institution.

An efficiency standard for head nurses is a desirable

GENERAL HOSPITAL

EFFICIENCY RECORD FOR HEAD NURSES

Name.....	Position held.....	Vacation.....
Home address.....	Length of service...	Illness.....
Religion.....	Salary.....	Absences, reasons...

Personality:	Loyalty:
Courtesy.....	To Institution.....
Kindness.....	To Superintendent and principal.....
Enthusiasm.....	To physicians.....
Ability to inspire these.....	Respect for authority.....
Executive ability.....	Observance of rules.....
Initiative	Manner to subordinates.....
System.....	Manner to patients.....
Organizing powers.....	Professional manner toward:
General control.....	Internes.....
Progressiveness:	Visiting physicians.....
Study of nursing literature.....	Visitors.....
Current literature.....	Temperament.....
Notetaking on newer methods.....	Judgment.....
Originality in plans of work.....	Tact and resourcefulness.....
.....	Economy.....
Improvements made or suggested.....	Effectiveness in carrying responsibility.....
Ambition to excel.....	
Lack of.....	
Teaching qualities:	
Theoretical work.....	
Practical work.....	
Example to pupils:	
Good.....Bad.....	
General interest in work of school.....	

thing for every institution to adopt. Whether the institution uses such a standard or not it is exceedingly important for a head nurse to have such a standard for herself. Probably most nurses have a sort of vague

standard which they hope to reach but it is too indefinite to be of any great help. Let a nurse ask herself how she would chart herself or rate herself in regard to the various points enumerated in the accompanying form.[1]

FOR DISCUSSION

What general measures apart from entering for a post-graduate course may a nurse use who wishes to give up private nursing and secure an institutional position, in order to better fit her for head nurse responsibilities?

What books should a nurse try to own who applied for the position of assistant to the principal in a hospital of 200 beds. What duties would she ordinarily be expected to assume?

Write a letter applying for a position as head nurse and include in it the points which a superintendent or committee would wish to know about any candidate whom they considered. Mention some points which such a nurse should be especially careful to observe in such a letter.

What questions should a nurse ask who was answering an advertisement for a night supervisor? for a chief surgical nurse? for a principal's position.

If a senior nurse seems to have a good many of the qualifications needed for executive work, but is inclined to spend too much time with internes, and to be gossipy with men in general as opportunity offers, should this failing be regarded as sufficient to disqualify her for such a position? Can such a failure be corrected—if so how? What is its effect on the tone of the school likely to be?

[1] From Studies in Ethics for Nurses.

CHAPTER XVII

The Head Nurse and Her Patients

In the relation of the head nurse to the patients there is afforded ample scope for the practice of many of the highest womanly virtues. Not only will her attitude toward them have a decided bearing on the comfort of the sick, but her influence on the pupil nurses will be far-reaching in its effects. To the patients, and to the general public, the head nurse stands in the relation of hostess, and from her will be expected the same courtesy, the same thought for the comfort of her household, as would be given by a lady to a guest in her private home.

The New Patient.—In the manner of receiving patients there is room for improvement in many hospitals. Head nurses can help much by rightly impressing patients and their friends at the very beginning of their hospital experience; by showing them in numberless indefinable ways that the institution is a place in which the Golden Rule is practised; by teaching the nurses of whom they are in command to give special attention to the latest arrival—the bewildered, depressed stranger in their midst. Too often the entrance of a patient is a most mechanical performance. To the nurse, she is one more individual in the never-ending procession passing through the halls of pain, one more patient to write orders for, one more on the diet-list, one more bed filled or one more room occupied—that is all. To the patient it is one of the momentous experiences of life, an experience dreaded, protested against as long as protests availed. Preceding the coming to the hospital has been, probably,

the parting from friends, visions of dreadful possibilities, the shrinking from committing himself to strange hands. But to the nurses he is simply "a case," qualified in some instances by the word "accident" or "fever," or by the name of the attending physician, as "Dr. A.'s new case" or "Dr. B.'s operative case." But whatever the qualifying term used, the patient is a "case," his individuality or his state of mind at that time apparently being of very little consequence. A few sympathetic reassuring words would mean more at that particular moment perhaps than at any other time in his life, but if the head nurse is too busy to speak them, if she has not trained her nurses to think of them, they will not be spoken.

Mental Needs of New Patient.—It is not enough that she teach nurses that the clothing of a new patient must be listed and put away, that his temperature must be taken and a bath given at the earliest opportunity. Nurses must be taught that a patient has a mind as well as a body; they must be trained not to overlook the mental attitude and feelings of a patient because they are busy attending to his bodily needs. The head nurse must remember to put herself in the stranger's place, to teach her nurses that to allay the unspoken questionings and fears is as important as the mechanical work to be performed for the patient, and can be done quite naturally in connection with it. To tell a patient at the trying period of entrance, for instance, that nearly everybody who comes here gets well; that every one will do everything possible to insure a good recovery; that he will like the hospital when he gets over the strange feeling, may mean the difference between peace of mind and mental distress. The neglect of such details does not always mean an absence of kindly feeling, but rather a thoughtlessness on the part of the head nurse that is deplorable.

Apart entirely from the discharge of the professional duties, or the treatments for individual patients, abundant opportunity is afforded for the head nurse to touch helpfully the inner lives of the patients. It may safely be inferred that many an adult comes to the hospital bringing with him, in addition to the physical disease, a burden of anxiety which may often be lightened by tactful management. A head nurse who knows how to listen helpfully to the recital of the troubles of her patients has gone a long way toward gaining the confidence without which no head nurse can do the best for a patient.

The very existence of the hospital reflects the desire of its founders and supporters and trustees to minister to human distress and bring comfort to the sick. It remains for the head nurse to interpret, in the truest manner possible, the real spirit of the institution. To neglect it, is to show clearly that she has a very imperfect understanding of the patients and their human needs.

The Need of Firmness.—It is needless to say that a firm, kind manner, a quiet dignity, must be maintained in all the intercourse with the patients. There is a tendency on the part of some pupil nurses who are by nature more talkative than others to talk more than is desirable to patients, to "visit" with them, and neglect other important and pressing duties. This tendency needs to be carefully watched and checked wherever manifested. A bright, cheerful, tactful, happy manner with patients is greatly to be desired in all nurses, but there is a danger, always present, of thoughtless nurses neglecting to notice the border-line between cheerfulness and familiarity, or mistaking when their duty to one patient ends and their duty to another begins.

The Patient's Friends.—While many sick people make heavy demands on a nurse's stock of patience, the

same is true, and perhaps in a greater degree, of the patient's friends. With them, as with the patient, much may be gained by establishing proper relations at the beginning, and by a little tactful attention at the right time gaining their confidence. From them valuable information bearing on the patient's condition or peculiar tastes may be secured. If the head nurse can succeed in getting a patient's friends to come to her with any complaint or grievance, instead of carrying the tales of trouble to the office, or pouring them into the physician's ear, or recounting them to friends outside, she has earned the gratitude of several people. This she will rarely succeed in doing unless she takes pains, on the entrance of a patient, to impress the friends with her genuine interest in, and sympathy for, the subject of their particular solicitude. If the neglect complained of is real, the patient's friends should be assured that all possible precautions against its recurrence will be taken and that real neglect will not be tolerated. If explanations are to be made, the head nurse is the person to make them. In nine cases out of ten a tactful head nurse can adjust the difficulties better than any other person, since she is in immediate command of the situation, and it is presumed thoroughly understands it. To remove all ground of complaint and keep things running smoothly, with easily ruffled, petted, or unreasonable people, calls for a fine display of tact and resourcefulness.

A great many head nurses furnish the worst kind of example to pupil nurses in regard to their attitude toward the patient's calls. They will sit carelessly chatting with interne or visiting doctor or with special nurses, and unconcernedly let patient's calls go unanswered till they get through with their conversation and are quite ready to go on with their work. Pupil nurses need no special urging to fall into the same attitude, and the

efficient service which the patient often is paying a good price for, and which the superintendent thinks he is getting, is not given.

Visitors and Relatives.—There are head nurses who seem to regard all visitors, and especially those termed "relations" as unmitigated nuisances. "They are always fussing around," they say. "They act as though there was only one patient to be attended to," is a common criticism. Too often the head nurse's attitude is indicated in the following remark: "A relation is the last straw."

Now, fortunately or unfortunately, we are obliged to live in a world in which "relations" are very important people—and always will be. The head nurse who does not want to be "pestered with the relations" should find some other occupation forthwith; she is out of place in any institution for the care of the sick.

Visitors and relatives are not often in a position to appreciate the degree of medical or surgical skill that the patient is receiving, but they do understand courtesy and kindness, and are quick to note its lack. The brusqueness and the lack of consideration which a head nurse may show, looms much larger in their minds than in hers, and the whole institution is apt to be judged by her.

One important fact that head nurses and pupil nurses should never forget is that in a hospital we are always dealing with "humanity on edge." Things which seem relatively unimportant to nurses, often assume large importance to patients and their friends. A very angry husband after a visit to his wife at the hospital descended on the president of the hospital board in his business office to complain that his wife was being terribly neglected. The president of the board saw at once that the man was too angry to really give a fair version of his trouble but

he allowed him to tell his story and assured him that he would look into the matter at once. What he did was to call the superintendent of the hospital on the telephone and suggest that the trouble be inquired into. It so happened that the mother of the patient had just a few minutes before, made a similar complaint to the superintendent. The mother had come to the hospital after the husband had gone, and had found her daughter in tears and feeling as if she were the most neglected person in the whole world—a very bad state of mind for a patient to get into in a hospital. What was the cause of the trouble? The old hoaryheaded time-honored complaint. She wanted a drink of water, had rung her bell again and again, and no one came to give it to her. That drink of water, or the lack of it, assumed such proportions in her mind that to give it to her was the most important thing the hospital could have done for her at the moment. As the minutes passed and no one came to answer her repeated rings, she felt she would die if she didn't get that drink. The superintendent made a speedy trip to the portion of the building where the patient was. It was in a small corridor, somewhat off from the main portion of the building having only accommodation for five patients. There were two nurses on duty, a senior and a junior, the senior serving as charge nurse for that small hall. The patient had had a special nurse for a few days following an operation and apparently expected as much attention after the special was dismissed as she had while she was paying for the special. The senior nurse decided to discipline her, and had told the junior to "just let her ring." Ring, she did, with the result just stated. Now "just let her ring" is bad advice for a head nurse or any other nurse to give to a pupil nurse. It spells trouble for the hospital too often, for such methods of discipline to go unchecked,

and the attitude which it indicates is fatal to efficient nursing. How should a young head nurse be instructed to deal with such patients and their friends as those just described?

The nurse who excuses herself because a patient's call was not answered by saying that she was busy, needs a very direct lesson on how to answer calls for one patient while she is busy with another. Nurses are not the only ones who have to learn this lesson. Go into any busy shoestore and ask to see a certain kind of shoe. The clerk will proceed at once to attend to you, by taking your shoe off—but that does not mean that he is going to give exclusive attention to your request. He has been instructed that if he wants to hold his job and make a success as a shoesalesman, he must be able to fit shoes on several customers at the same time. He must not neglect one because he is busy with another. A very important part of the training of a pupil nurse is to develop her so that she will be able to keep the needs of all her patient's in her mind, be able to keep them all contented, to be busy with one patient and not neglect another. The head nurse who assumes the responsibility for this instruction (and every head nurse does whether she realizes it or not), needs to study how to secure the highest degree of coöperation among the nurses working under her direction. There are treatments—a great many of them, where a nurse should not leave a patient till the treatment is finished, but when she expects to be "tied" in order to give some treatment properly, she should arrange for some other nurse to answer her calls. This spirit of coöperation among nurses is more essential than many of them realize, and no petty animosities should be allowed to interfere with it. If nurses cannot work together harmoniously, supplementing each other's work for the good of the service, then the fact is one to be

reported to the principal—those nurses should be separated, and given a special lesson on the immense importance of team work in a hospital.

When Alarming Symptoms Develop.—There is another point in dealing with a patient's friends that needs to be handled sensibly, sympathetically, and carefully—a point in which much will depend on the nurse's judgment. To say that a disease is to have a fatal termination, that the end is rapidly approaching, and that the patient's friends should be notified, may not be her sole responsibility, but it is one which she must share. She is the person who will perhaps be the first to notice alarming symptoms, and while the raising of unnecessary alarm should be guarded against, it is infinitely better to summon the friends unnecessarily than to have the end come without having notified them that it was expected. This will happen in the best regulated hospitals sometimes. Sudden changes will come that are as much a surprise to the people in the hospital as to the friends outside; but no failure of the hospital is criticized more than the neglect of this one point of duty. It is one of the hardest things to forgive, and will rarely be forgotten if it is forgiven. It will be told and retold in an attempt to prejudice others against the hospital long after the patient's name is forgotten in the institution.

Incompatibilities.—Another delicate matter with which head nurses will often have to deal is the incompatibilities of disposition which arise between patients and nurses. When a patient takes a strong dislike to a nurse, it is, as a rule, no use to reason with him. Some adjustment must be made. It may seem an injustice to the nurse to remove her when she is apparently honestly doing her duty and trying to satisfy, but in reality it is a greater injustice to keep her in charge of a patient who, because of his dislike, will certainly misrepresent her, and if he

is in a ward, will incite others to complain. Incompatibilities of temper and disposition occur very frequently even with people in health and with individuals who have much to divert their attention. It is, therefore, not to be wondered at that they frequently occur with the sick, with whom mistaken magnitudes are very common. It is never a good plan to argue with the patient who has taken a dislike to a nurse or who frequently complains of her, or to try to convince him that his grievances are imaginary. Then he will be certain that he has at least one real grievance, and that the head nurse has no sympathy with him. Let him understand that it is taken for granted that there has been ground for complaint, that the matter will be looked into and corrected. There are ungrateful, unappreciative people, and will be till the end of time—people who would try the patience of an angel. There will be nurses, while hospitals last, who will give cause for complaint wherever they may be placed, while at the same time they may commit no flagrant misdemeanors and may do fairly well with some patients. Many disagreeable patients ought to be firmly dealt with by the head nurse, and often the mere calling their attention to their unreasonable demands, or to their conduct, will work a happy change for all concerned.

The Patient's Point of View.—A great many people who leave a hospital having made a good recovery, recall for many years afterward the small annoyances which to their mind were inexcusable, with which they were afflicted while in the institution. These things seemed harder to bear than the real pain which they expected, and were prepared to endure. Of all these minor defects in the service, that which is probably the hardest to endure, is that their point of view was habitually ignored, their preferences for simple things which should have been

easily secured, were forgotten. A patient who never drinks coffee, tells the nurse who admits him that he cannot drink coffee without feeling sick after it, and requests to have tea served with his meals. At his first meal the coffee comes. He protests and after that one protest is given tea, but meantime the meal has cooled while the tea was being brought. He expects that this preference will be remembered but probably it is habitually forgotten or ignored. He continues to have coffee served to him, which he never touches, and in time he feels he has a real grievance—and he has. Or perhaps the tea which is served is cold—nearly always cold, and badly made. He longs for a good cup of tea and gets it not. This illustration might be multiplied again and again in regard to simple matters of diet, which were easily secured in any hospital, if the nurses took pains to remember the request and attend to it.

A patient who was on the editorial staff of a city daily paper was accustomed to having an orange every morning for breakfast. One nurse took pains always to see that the orange was provided whether it happened to be on the regular menu or not. There were nearly always oranges in the ice-box which were easily gotten. Everything had gone smoothly until a day or two before the patient was to leave the hospital, when a tactless nurse told the patient he could not have an orange, that there were none in the ice-box and she didn't have time to get any. The result was a veritable tempest. The small thing in the nurse's opinion was a big thing in the patient's mind. He was paying for service, and was going to see that he got it. The superintendent was sent for and was obliged to listen to a tirade about lack of service, that had some truth in it, but was greatly exaggerated. He threatened to air his grievances in the newspaper when he went out. The hospital had had a

good deal of trouble with this one special newspaper which seemed to never lose a chance to "knock" the hospital in some way.

Such complaints may at times be far-reaching in consequence. The prestige of the hospital suffers, friends who might have been contemplating contributing to furnishings or to a maintenance fund hesitate, and perhaps abandon the intention because they are not sure whether patients really are well cared for or not in that hospital. The nurses complacently call the patient a "crank" or a "chronic grumbler," act as if he had no grievance at all, and go on and repeat this failure again and again—unless the head nurse in charge has the foresight and tact to give the patient's point of view some consideration, and see that his preferences as far as possible are considered, while he is a guest of the institution.

Noise is another grievance which is woefully common. A patient goes to a hospital expecting quietness and a restful atmosphere. He is irritated a hundred times a day by noise which is easily preventable, but which the head nurse does not control, and evidently does not try to check. Loud talking in the corridor, persistent chattering near the door of a patient's room, the clatter of bed-pans, chart files and utensils, slamming doors, squeaky hinges which should have been oiled—a lot of small items together constitute a nuisance of no small dimensions in a hospital One of the earliest recollections the author has of head nurses goes back to probation days and to a head nurse who used to stand at one end of a long corridor and yell for the probationer to bring this or that which the head nurse had forgotten to get when she was preparing to do a ward dressing. The probationer rebelled (inside) against such unprofessional conduct in the head nurse, which, inexperienced as she was, she recognized as out of place and improper.

A man patient who occupied a room next to Mrs. Blank, both rooms being close to the nurse's chart table, heard Mrs. Blank and her condition discussed every day. "Had Mrs. Blank's bowels moved," the head nurse would ask. "Was there much discharge from the vagina," etc. The man got the benefit of all these various observations on Mrs. Blank's condition, while Mrs. Blank was paying for privacy and for professional service which included having her personal affairs kept secret, so far as other patients in the hospital were concerned.

A long list of petty trials which patients suffer from—being left half an hour on a bed-pan, the nurse starting to take temperatures and going away and forgetting that she left the thermometer in a patient's mouth, too strong light in the eyes which a proper adjustment of shades would have remedied, the neglect to place screens to shield a patient from a draughty corridor, the frivolity of some nurses which jars on very ill patients, neglect to wash the patient's hands when a bed-pan is used just before a tray is served, the accidental placing of the small things which the patient likes to keep near him—just out of his reach, the lack of daintiness about a hundred things which a refined patient notices and rebels against—these together may constitute a good sized grievance, without the head nurse recognizing that such things go on all the time—unless nurses are trained daily and hourly to guard against them. We go to great expense to heal the sick, and help them to regain their health and nervous balance, and often at the same time expose them to counteracting influences which retard the recovery to such an extent that a good many patients leave the hospital before they ordinarily should or would, because of the constant noise, the impossibility of getting proper rest and the petty annoyances which good nursing would eradicate and which a properly trained and well-equipped

head nurse would not tolerate. Pupil nurses are allowed too often to neglect these small attentions and call a patient a "fussy crank" who was asking only for the most reasonable things—things which he should have had without having to ask for them.

"Nursing can never be impregnated too thoroughly with the perception of the patients' inner point of view. Often when they are mistaken a kindly word of explanation suffices to alter their opinion. But they are not always mistaken. For the most part they are sensible men and women, and there is nothing they will not cheerfully endure when treated with respect as reasonable beings. What depresses their vitality and retards their cure is the sense that their individual point of view is a negligible quantity. Where this is the case the patients lose much. Do not the nurses lose even more?"

Questions of Creed or Color.—In a general hospital where no distinctions are made because of creed or color, situations calling for a high degree of tact and good judgment will sometimes arise when the question of creed or color has to be met. No woman with strong racial prejudices is well fitted for institutional life. A broad, general sympathy with the aims and objects of the institution, and with the entire class of patients for whom it was designed, is an important requisite in a head nurse.

The religious beliefs of patients are subjects with which no head nurse has a right to interfere, nor should any levity regarding the forms and ceremonies used by any sect be permitted among nurses. Complications regarding diets prescribed or forbidden by certain sects will occur, and must be met with a broad sympathy and tolerance. Few things will arouse more gratitude on the part of a patient than a practical expression of sympathy with his religious beliefs when he knew the nurse was not of the same belief. It is undoubtedly trying to have a

patient's breakfast postponed till a certain rite has been administered; it is trying to admit clergymen at unseemly hours when perhaps the morning sweeping is in progress, or treatments of various kinds are going on. But we are not in the business merely to please ourselves, and when such things do occur, they must be met with courtesy and patience and ready assistance. Such occasions to a patient in a hospital mean more than we can readily realize.

FOR DISCUSSION

Prepare a set of standing orders which will cover the points which a head nurse should expect pupil nurses to observe in regard to new patients.

What can be done to check the "talkative" nurse who visits too much with her patients, or who establishes confidential relations with people on very short acquaintance telling her own intimate personal affairs to patients whom she had never heard of twenty-four hours before?

How should a nurse be handled who tells a patient that she would likely suffer from adhesions after an appendicitis operation, or that she would probably have to have another operation, telling of some other patient who had to return in a year for a second operation?

Show how the establishing of cordial relations with the friends of a patient at the beginning, is a help to the general work of the institution.

When incompatibilities of disposition occur between a patient and a nurse and it is evident that the patient for no apparent reason has taken a dislike to the nurse, what should be done?

Make a list of some of the common small grievances which you have observed with which patients are unnecessarily inflicted, and outline measures for prevention.

CHAPTER XVIII

The Responsibility of the Head Nurse to Probationers and Juniors

A great deal that should be taught to pupil nurses will not be taught unless the head nurse assumes the responsibility for teaching it. She must be responsible in large measure for proper methods in bedside technic. Her manner and methods will be reflected in the probationers. She sets the pace and the standards which to a large degree they will follow.

Why is it that so many good, practical, graduate nurses make conspicuous failures as head nurses? A hundred reasons might be given. Quite often the probationer's life is made miserable because the head nurse does not like to bother with probationers, protests against having them in her department, and does not attempt to conceal her feelings in regard to them. She does not take pains to teach clearly what she does try to teach, and expects them to understand at once that which is perfectly clear to her.

She reprimands them before patients, and too often allows the nurse with a few months more of training time to her credit to snub the "probes" without a reprimand of any kind. Her own spirit and attitude toward probationers is contagious, and, in many institutions, the probationer's life is made needlessly hard by petty snubs, slights and impositions from those who but a few months before were probationers themselves.

Fairness in dealing with nurses must be one of the guiding principles of every successful head nurse. In the very nature of things a considerable part of her work will

consist of correction and rebuke. If the task of correction is carried out wisely without favoritism, and an even justice to all is maintained, she has gone a long way to inspire the respect and confidence which should be given her if she is to do her best work without friction.

Decision.—One important quality which the head nurse should study, to secure in herself, is decision of manner. She must have this if she is to inspire confidence in the nurses she is training or has charge of. She may be undecided about many things, but it is never a good plan to let the nurses know it. If they are to go about their work happily and confidently, they must be led by one whom they feel they can rely on when in difficulty. It is unnecessary and unwise to say very much about changes that may be under contemplation, but when the time comes to make them let decision of manner accompany the announcement.

The Matter of Rules.—From the time a nurse begins her career as a probationer in the training school she should be given a clear understanding as to her relations to the institution, to its various officers, to nurses, and to servants. A copy of the rules regarding nurses should be furnished her, and any necessary explanations should be made at that time. This the institution owes to every probationer. She should not be allowed to learn rules by breaking them, or to get hold of them through the uncertainties of tradition. When a nurse has been told the rules, it is the business of the head nurse to see that they are enforced as far as relates to her department, and to coöperate with the principal in the maintenance of discipline.

It need hardly be stated that the head nurse herself should strictly observe the rules of the hospital, which are made with the good of all concerned in view; but, as a matter of fact, many head nurses are anything but good

examples in this respect. Too many head nurses are a law unto themselves; too many of them resemble Kipling's heathen, of whom it was said: "'E don't obey no orders 'less they is his own," a most undesirable characteristic even in heathens. When it is found in a head nurse it bodes no good to the institution. If the house rules say "Lights in patients' rooms must be extinguished by 9 P.M.," that "nurses must not visit in the hospital proper while off duty," and the head nurse is found visiting in a patient's room at 10 o'clock at night, it is very likely the pupil nurses will soon get the impression that rules are not of much importance—not expected to be observed.

It has been said that discipline is the difference between an army and a mob. If even a measure of discipline is to be maintained, head nurses must be impressed with the necessity of teaching, both by precept and example, that rules are to be observed; that if, for any reason, it becomes necessary for a nurse to deviate from them, explanations or apologies are in order.

Loyalty is Contagious.—The strength of any institution is in the personnel and the harmony and loyalty of its working staff. Let the head nurse watch herself that she be not found criticizing her superior officers and the institution in the presence of nurses and probationers. This is one of the failures on the part of a head nurse that it is hard to overlook. A good deal of emphasis needs to be placed on the ethical responsibilities of the head nurse, because in this day and age ethical failures are much more common than failures in technic. To make the nurse feel that her failure reflects on the whole institution, and her indiscretion or blunder on the whole body of nurses, is not accomplished in a day. It comes as the result of painstaking teaching on the part of head nurses, the calling attention to the way the public will

regard this and that thing which, to the probationer or junior nurse, seem so trivial and innocent.

Every head nurse owes to the hospital with which she has identified herself her allegiance to its highest interests. She owes to its authorities respect, to her associates in service the courtesy demanded of a lady. She owes to the institution the preservation of a discreet silence regarding its internal affairs, such protection of its interests as her position enables her to give, no matter how antiquated, inefficient, or inadequate she believes its service to be. If she wishes to introduce change in method, she owes it to those who, in the final resort, carry the responsibility, to consult them before attempting to instruct those over whom she has authority to deviate from the methods in vogue.

Her attitude toward the physicians will determine in large measure what the attitude of pupil nurses will be. If she wastes time in entertaining the interne, in discussing affairs that have nothing to do with the work, if she permits boisterousness, joking, and familiarity where doctors are concerned, she lowers the whole tone of the institution. If she allows herself to openly criticize a doctor in the presence of pupil nurses, she can never tell how far her criticism will go, or what injury may be wrought by it. Unfortunately, not all physicians so conduct themselves as to win the respect of those who must work with them, but if criticism has to be made, let it be made to the superintendent of the hospital, and not to pupil nurses, or patients.

There are times when loyalty to the physicians is severely strained—when it is hard to reconcile the principles of professional loyalty with her duty to the patient, but the general principle of loyalty can as a rule be maintained if a head nurse seriously decides to observe it. This principle can be carried out impartially though

there are many occasions when to do so will be difficult. She owes to each physician her loyalty—not loyalty to Dr. Jones and an utter disregard of Dr. Brown's interest. She can often, by a sentence, or even a shake of the head at the right time, undermine a patient's confidence in Dr. Jones, but she has no right to do it, even though she does not like the man nor approve of his methods. She owes to the attending physicians absolute silence regarding their professional demerits or blunders.

The lesson of implicit obedience to authority is one that the head nurse must learn and teach if she is to successfully command others. In a hospital, perhaps more than in most institutions, it is necessary for military discipline, military precision, military obedience, to prevail. This is one of the hard lessons for many head nurses to learn. It is difficult for them to measure accurately the degree of their influence upon others. Instead of creating in their subordinates a respect for authority, they manage to stir up questionings and doubts in the minds of pupil nurses as to the wisdom of this or that ruling. This is perhaps not often intentionally done, but, intentional or otherwise, the results are the same. The human tongue everywhere is capable of creating trouble unless controlled by principle, and the head nurse is in a good position both to create and to quell institutional disturbances.

Perhaps few lessons are harder to teach probationers than that orders must be promptly obeyed, or, if they cannot or should not be carried out, the nurse must come and consult about it, whatever the difficulty may be, rather than herself decide that it need not be done. Half the complaints would be prevented if this rule were early ingrained into the consciousness of the nurses.

In their very early nursing days, it cannot be expected that nurses will understand the reason for, or the im-

portance of, much that they are told to do; neither can they foresee the disagreeable results that may occur if they do not do the thing they are told.

A large part of the training, of a nurse in her junior year, consists in close observation of her personal habits and spirit, and the correcting of the little crudities, cultivating in her the qualities of body and mind which we desire. This part of the training should go on continuously—here a little and there a little, with close attention to the possible presence of serious moral defects. The graduate nurse who is deceptive about her patients' records was deceptive as a probationer; but some head nurse either failed to find it out or considered it of minor importance and, apparently, it was glossed over.

There is a danger of undue severity toward the probationer, but there is much more danger along the line of slackness. It is not a mark of kindness to a nurse to let her faults go unchecked. The nurse who is noisy and boisterous, who lacks in gentleness, might have been trained to move and work quietly, and go about her patients in a gentle manner, had the head nurses who trained her taken her wisely to task about these matters. The nurse who was too familiar with her patients, who lacked dignity and professional reserve, might have had these faults corrected, had some head nurse quietly taken her in hand, and pointed out the way in which these defects of habit and manner would prejudice her in the minds of many refined families to which she might be called. The young nurse does not know of the dangers she is going to encounter as a nurse, nor of how a familiar manner *with* patients may lead to familiarities *from* them. She may have been reared in a small place where everybody knew everybody else, and where children who had played together at school often continued to exercise a certain familiarity when they grew older, which would

be much misunderstood when under different conditions. It is a part of the head nurse's responsibility to see these things as danger signals, and give the timely word of warning and of counsel.

Careless habits in a nurse may be overcome by *careful teaching*. This fault often has its roots in the lack of placing definite responsibility for definite duties on the growing girl. It is much more apt to appear in the girl who has been kept on year after year in school or college with no definite tasks to be performed for the comfort of family, or friends, or anyone else. The nurse who forgets, whose intentions are good, but her memory bad, may have the bad memory strengthened, may be changed into the nurse who remembers; but it takes time and a good deal of patience and personal attention on the part of the head nurse if this is done. Once again, let it be remarked that it is no kindness to overlook these faults in probationers. Let it be remembered also that once telling will never correct these defects, and that the head nurse's example and methods will often speak louder than anything she says.

The head nurse who dislikes teaching should resign her position forthwith. She must teach or she is a failure. The daily rounds should include a lesson here, another there, a word of correction, an extra emphasis, a calling attention to a great variety of minor details, which together make the difference between good and bad nursing. She must also be careful that in getting the technical training which nurses seek, they do not lose, or fail to cultivate the admirable qualities which go to make a high-grade *woman*. It is perhaps only human, when in the rush of hospital work, the head nurse gives special approval to the nurse who gets through her work on time, but fails to do many little comforting things which some patient needed to have done. The nurse who is

behind time in finishing may spend more time in talking, or "visiting," with her patients. She may be easily confused, may lack the methodical habit which makes her able to plan her work, or she may be more conscientious about the minute details of nursing, and give a much better measure of "heart service" than the nurse who is always through on the minute. It is for the head nurse to be able to discover the reason for the difference between these two nurses, if she is to do justice to either of them.

In the matter of preventing useless waste, the head nurse becomes a potent agent for or against true economy. She it is who must see that articles are not used for wrong purposes, that expensive materials are not used where less expensive would do, that sheets and bed linen are properly handled, the beds kept clean without lavish use of linen, that the supplies in her ward are judiciously handled, that the nurses know the cost of the articles they are using, and that a proper sense of stewardship is developed in the nurse. This is not only a matter of justice to the hospital, but of kindness to the nurse; for one of the serious criticisms of private nurses, as a class, is that they are wilfully, distressingly extravagant in the use of bed linen and supplies, that in average private homes are not easily or cheaply secured.

The management of probationers and the proper organization and regulation of the work of the wards so that the probationer is not imposed on by the older nurses is more or less of a problem in every hospital. The tendency for intermediate and senior pupils to regard the probationer as a "general utility" person whose duty it is to do anything which they do not wish to do, seems well-nigh universal. It can only be prevented by each head nurse so organizing her work and assigning duties that probationer and senior will be held responsible for their own definite tasks. The head nurse

should never allow the idea to grow that promotion in the work of a nurse affords an opportunity for laziness, or for imposing extra burdens on those least fitted to bear them. There is a kind of petty tyranny exercised by many seniors in their treatment of probationers that is based on pure selfishness. It may be exercised to a degree that the head nurse is not aware but at least she should know that seniors are subject to such temptation, and guard against it.

Contentment with slip-shod or mediocre nursing or with stereotyped routine observations, is always a hindrance to the development of pupil nurses. It discourages the really good workers. It lessens the desire to improve or to excel. It is one of the greatest mistakes a head nurse can make. Pupil nurses soon learn that they can "get by" with indifferent or careless work when a certain head nurse is in charge, that would not be tolerated in another department. A reputation for being "easy-going" soon spreads, and is likely to affect the whole quality of the work.

It is of course quite possible to expect too much of pupils. Physicians who see a probationer who has just been given her uniform, often make the mistake of expecting her to anticipate their needs, and render them the assistance that should only be expected of experienced nurses. But the standard and quality of bedside care had better not be too low. The natural tendency will be toward lowering the quality rather than raising it. Knowing what she can "let go" without anyone suffering thereby, and when to overlook a failure if the work is heavy, is a kind of wisdom that comes only with experience.

Praise and Blame.—The head nurse who studies human nature and who closely and sympathetically observes the efforts of pupils, will soon see the wisdom of learning

how and when to praise a nurse for work well done, or for prompt perception of an unusual or unexpected symptom in a patient. The habit of giving praise as well as blame or correction when such is merited, will go far toward securing from the pupils the degree of coöperation, which is necessary to good service and to the comfort and welfare of the sick.

The head nurse who is too ready to accept excuses from pupils for duties not done, is as great a detriment to a hospital as the one who keeps every one who works with her unhappy by her constant fault-finding, and her neglect to encourage the pupils by a few words of commendation when they have certainly deserved it.

There are faithful head nurses who uncomplainingly day after day put things in place which some pupil carelessly dropped when she was through with it, who make excuses to doctors for the lapses of pupils, who instead of holding them up to their task and seeing that their work was done in such a way that no apology or excuse was necessary, continually try to make good the defects by doing it themselves. This failing is more common among inexperienced head nurses who wish to give the impression that all is running smoothly in their department, or who have a craving for popularity. This habit should be recognized as a weakness in a head nurse, and a distinct limitation to her usefulness.

If the nurse's duties are not done on time the fault may not have been wholly with the pupils. It is just as likely to have been due to the lack of proper or methodical arrangement, to lack of system. A great deal of time and strength is wasted by beginners because they do not know how to go about their work methodically. They are impressed with the idea that there is a great deal to be done, and run hither and thither, starting to do perhaps half a dozen things, without really completing one

duty. This habit should be corrected by the head nurse early in a pupil's career.

Off-duty Hours.—The arrangement of time so that the nurses will get the off-duty hours away from the wards that they are expected to have is one of the responsibilities of the head nurse. It is a point where many fail, and their failure is a potent cause of discontent among pupil nurses. In all institutions there are days when the work is heavier than usual, when perhaps the working force is depleted through sickness or for other reasons, when in order to do justice to the patients it may be necessary to keep a nurse on duty after the regular hours, but these should be the very exceptional cases.

Reporting the fact that it was necessary to omit off-duty hours, or keep nurses on duty after hours, with the reason for it, should be insisted on by the principal. The overtime should be noted, and the pupils should understand that they will get extra time a little later, as soon as it can be arranged, for this overtime duty.

This plain rule of justice is necessary not only for the good of the nurses, but for the good of the patients and the hospital. A tired nurse is never able to do her best work. Enthusiasm is dulled, the efficiency of the whole service is lowered, if the recreation hours of pupils are cut off habitually.

It is due the principal of the school to know how much overtime duty is being demanded of her nurses, and in larger institutions this can only be known by requiring each head nurse to send in each evening on a specially prepared blank, the name of the nurse, the amount of overtime exacted, and the reason for it. When this overtime is habitual, one of two or three things is usually the cause. Either the head nurse does not know how to manage her work, is not adept at showing her pupils how to get through on time, or there are not enough nurses.

If there are not enough nurses to care satisfactorily for the patients, it becomes a matter that may need to be reported to the board of managers. But before doing so it is wise to try another head nurse in the same place, with the same working force, and see whether she also finds so much overtime necessary. Perhaps some of the nurses are unusually slow in movement though desirable in other ways. A few hours spent with a slow pupil showing her how to arrange every item of her duties so that neither time nor strength is wasted, will often work wonders, and do away with the need for overtime duty. Take the routine work for one forenoon, write out in the order in which the work is to be done, every detail, so far as it can be anticipated. Let the pupil know the average time which should be consumed in the routine duties. Show her where she loses time, how to use her head so as to save steps, and a discouraged pupil who was constantly made to feel that she was a failure, may be changed by this bit of "efficiency" teaching, into a contented happy worker.

The Spirit of the Service.—An important test of a head nurse's ability, is the way she manages her working force on the days when everybody is obliged to work to the limit because of some unusual pressure. On such occasions a sense of humor is a wonderful help. Often a hearty laugh will relieve the tension, and give just the bit of relaxation that was needed at the moment.

Training in the humanities is an important part of a head nurse's preparation for her work. She should not forget that time is often gained by stopping long enough to revive the fagged workers with some needed bit of refreshment, which they would not have if she did not plan for it. It is when the day's work is heaviest, that she needs most to remember that a bit of praise is a wonderful stimulant to a faithful willing group of workers.

The nurse whose feelings have been hurt presents a common problem. Sometimes for the nurse's own good, they needed to be hurt. If a nurse does not do a task properly when she has been taught, and gets a rebuke from some source, because of her carelessness, it is a question whether she is deserving of sympathy. But if she has earnestly tried to do the right thing in the right way, and has failed through misunderstanding, or through no fault of her own, the problem has a different aspect. Without condoning an omission or error, the head nurse can at such times do much toward gaining the confidence and loyalty of nurses, by letting them understand that she knows and believes they are capable of better work. Quite often the best thing to be done is to let the nurse have her cry out, and her nurses will respect her none the less if she expresses her understanding of the lapse or difficulty, by slipping an arm about the injured one, and letting her sob out her trouble on the head nurse's shoulder.

If a probationer or pupil slipped on a step and twisted her ankle, she would get all kinds of sympathy, but often we forget that a bruised heart or wounded feelings are more painful than bruised flesh, and we withhold sympathy out of some mistaken notion about discipline. It is not necessary for a head nurse to place herself on a pedestal to gain or retain the respect of her nurses.

On the report of the head nurse will depend largely the acceptance or the rejection of the probationer, since she is in a measure responsible for her work and conduct, and is especially well situated to observe whether or not the candidate has in her the qualities necessary for a successful nursing career. Just here a word as to the need of patience with the probationer is in order. There are many head nurses who are in themselves capable workers, but who are utterly unable to see the promise or the

possibility in a probationer who is slow in developing. With them either a probationer is a "jewel," or she is "good for nothing." There is no middle ground with them. They lack the power of seeing beneath the surface, of perceiving the diamond in the rough Many a nurse who has, later on, proved to be a tower of strength to institutions and to homes, an assistant most acceptable to physicians, and a true friend to the sick, has in the beginning been most unjustly dealt with because some head nurse did not see the use of bothering with her and reported adversely concerning her. Then, too, very frequently a nurse who has seemed to be a failure under the direction of one head nurse has done acceptable work when placed under the supervision of another. As a rule, the probationer who is slow in developing will be more likely to succeed in a small training school, where she comes into closer touch with the superintendent; where there is greater opportunity to study individuals, and where the sterling qualities are not lost sight of, or obscured, by the brilliancy of some brighter candidates who do not always continue to shine so brightly when they get further on. At the same time a head nurse should not shirk from the disagreeable task of recommending rejection when she is fully convinced of a probationer's unfitness.

FOR DISCUSSION

Mention several points which a head nurse should guard against in beginning to assume the duties of a new position.

Give illustrations of the wise and the unwise ways of administering a rebuke to a pupil nurse.

Show why it is essential to efficiency and good government for a head nurse to show her loyalty by carefully observing the rules of the institution.

Discuss methods of planning for the routine daily work in a fifty bed hospital with twenty pupil nurses and four probationers, two

graduate nurses being on day duty in active charge of the work, in wards and rooms.

What can a head nurse do to assist the faithful nurse who is always slow.

Mention some offences of pupil nurses which head nurses should always be careful to report to the principal.

What should a head nurse do when she finds that her nurses are habitually required to work overtime in the wards. What measures might wisely be tried to correct this difficulty.

CHAPTER XIX

Bedside Teaching

A large part of the best teaching done by a head nurse in the wards can be done through asking direct intelligent questions which will set the pupil nurses to thinking and finding out. The day has gone by when we expect nurses to adopt the attitude

Yours not to reason why
Yours not to make reply.

Rather we expect them to reason why and to make reply till they at least understand what is expected of them. When they try to argue the point about a definite order it is a different matter.

Prefixes and Suffixes.—A type written list of prefixes and suffixes posted or placed where nurses on duty have ready access to it, will help a nurse tremendously in grasping the significance of many of the puzzling technical terms she hears in the first year. The prefixes can be secured from any good medical dictionary.

A probationer was heard asking a junior nurse what disease a certain patient had. "Why she's a hysterectomy case" replied the junior, "What's a hysterectomy case?" was the next question, "It's an operation that people have when they have hysteria" was the illuminating reply. Now, unfortunately, this kind of illuminating teaching in hospital wards is far too common. It is not unusual for a nurse to care for a patient from entrance to dismissal without having any clear idea of the conditions she is dealing with. Having at hand, in

every department, a list of prefixes and suffixes will help a good deal; but if a head nurse is interested in her job, and awake to the opportunity, she will encourage pupil nurses to come to her with their questions. She will study the art of asking questions concerning the patients, that will not only lend interest to the day's work, but markedly increase the pupil's powers of observation. She will look over the patients in her ward or department periodically with a view to deciding which may be used to demonstrate or make more clear some bit of knowledge her nurses should have.

Suppose that in regard to the hysterectomy patient, the head nurse had asked the nurse who was curious about her patient to look up the location of the uterus, the structures or organs adjacent to it that were liable to be involved in the disease, or injured during the operation, and had called attention to common dangers in such cases, it would have taken but a few minutes time. It would have tied up the dry subject of anatomy with the practical work of the wards, would have added to the pupil's interest in her work, and altogether would have meant better, because more intelligent, nursing. It is this kind of informal teaching which needs to be stimulated and developed by every means in our power.

There are certain kinds of practical questions which are particularly applicable to nurses in their junior year, which a principal might wisely have typed and furnished to ward head nurses as a help in bedside teaching. These questions would differ in the various departments—medical, surgical, obstetric, etc., but would certainly be helpful in linking the work in the wards with the theory that is being taught.

Not Supposed to Know.—A doctor who was one of the staff of instructors in a certain hospital school, in passing through a ward, noticed one of the pupil nurses who was

in his classes, giving a vaginal douche. As she concluded the treatment, he ventured to ask her why she was giving it—what she expected it to do. She didn't know what effect it was supposed to have. He asked her what the patient's condition was. She blushed and finally replied that she was "not supposed to know." "But you do know," he continued mercilessly. She had to admit, that though the diagnosis had not been mentioned, she had found out what it was—but "was not supposed to know." At what stage in a nurse's training does she emerge from the "not supposed to know" class?

A good general rule for a junior pupil is to instruct her to report as abnormal any symptoms or conditions found in a patient which she has not noticed in healthy people, or, which she herself has not. A few words of commendation about new symptoms noted will act as a wonderful stimulus in sharpening the observing powers of pupils. To withhold a diagnosis without good reason is a handicap to good nursing efficiency. Even when the actual condition is obscure or in doubt, it will help the nurse to know what the tentative diagnosis is.

The taking of temperature, pulse and respiration is apt to become a routine performance, and unless attention is called to the special significance of rise of temperature or marked deviation from normal in pulse and respiration in certain cases much that should be noted, will be overlooked.

There are certain important signs to be looked for in special cases which are less important in other cases. It is certainly a head nurse's duty to call the pupils attention to things to be watched for. This rule is quite as necessary with night nurses as with day nurses.

A certain patient who was threatened with a miscarriage was admitted to the hospital in the hope of avoiding

it. The husband and physician were most anxious about the outcome. Certain symptoms were of special importance, particularly that of a bloody vaginal discharge. The night nurse did not know what the patient's condition was, or why she was in the hospital. She reported a normal temperature, and a few other commonplace observations, but omitted any mention of symptoms bearing on the condition for which the patient was under treatment. The doctor and the patient's husband came in the morning. The head nurse was unable to give any of the desired information. The observations on the chart told nothing of any value; the night nurse was in bed. Naturally there was some indignation expressed at this quality of nursing. The day nurses knew the things to look for—the night nurses did not. It was a case where the head nurse had failed quite as much as the pupil nurse.

Securing the patient's coöperation in regard to special treatment is often essential to the best results. In a great many cases there is no good reason for not explaining to a patient the reason why he may not do this, or must not do that, but in comparatively few hospitals have we advanced to the stage where this is done, whenever it can be done without detriment. Things about which there is no need of mystery are surrounded by mystery and the patient often rebels in consequence. In a few carefully chosen words to patient and pupil nurse explaining the condition, a rebellious discontented patient may be changed, and a pupil nurse receive a valuable lesson—if the head nurse is awake to the opportunity. For example a man refused to pay the balance of his hospital bill because he said his wife was starved most of the time while in the hospital. There was a degree of truth in the statement, but there was a reason for the restriction in regard to food which should have

been explained to him, and to the patient, but was not. Manifestly a good deal of judgment needs to be used in making such explanations but in this age when we hear so much about the nurse's duty as an educator, when almost all sorts of health and disease conditions are openly discussed in magazines and newspapers, why withhold from pupil nurses, or from the average patient, knowledge about a patient's condition that can wisely be told.

Some progress is being made here and there in the matter of helping patients to better understand their own condition and promote their own well-being. In some places diabetic patients after being treated in the hospital till the urine is sugar-free, are instructed in a simple method of testing urine for sugar, and also in how to prepare such vegetables and foods as they are allowed to have so as to get the best results.

In other places the coöperation of various hospitals has been secured in instructing mothers who enter the hospital for childbirth in the best methods of conserving the health and well-being of their babies. They are taught while in the hospital the details of feeding, clothing and general care as well as how to promote their own health. When one considers the deplorable death rate of babies under one year old the opportunity to help reduce it should make a strong appeal to every head nurse.

A lady who was interested in getting a certain patient to go to a hospital relates the following experience. The woman finally did go for an examination and was told she would have to enter as a patient. "Well I ain't agoin in," she told the lady, "If they can't do me any good outside then I stay as I am." On being asked why she refused to go in she explained. "Its like this Miss, my sister was a big strong girl but she was

taken sick and went to the hospital to try to find out what was the matter. They said she had gastritis and that she'd have to come into the hospital. She was using the gas-irons at the time—working in the laundry. Well, she did go in—and didn't they try to starve her. I suppose she gave them a lot of trouble and they were paying her up for it. She wouldn't stand the way they treated her, and after four or five days starving her, she came out. The poor girl died soon after she came home."

The lady took the opportunity to tell the woman that gastritis had not the connection with gas-irons that she imagined. She explained the possible presence of ulcers of the stomach, and how food would irritate or tear the ulcer and keep it from healing, and that was why her sister had not been given solid food. The poor woman wept as she exclaimed that had they known that was the reason, her sister might have been living now. A good deal of the difficulty that is experienced with friends trying to secretly convey food, of one sort or another to patients might be avoided by a frank explanation of the reason for the food restrictions. This may be difficult with those speaking a foreign language, but surely the neglect to do this when it can be done, means the loss of valuable opportunities for instruction in health matters, that would lessen considerably the increasing burdens on hospitals.

When a nurse is allowed to give baths, it is a good plan to furnish her with a copy of the blank used by the internes in some hospitals in making their physical examinations. For example:

Head—wounds, deformities, hair, vermin.

Face—color, perspiration, expression.

Neck—glands.

Chest—respirations, skin, rash, shape.

Tongue—dryness, color, coating.

Heart—pulse, vessels lumpy and knotted or distended

Lungs—cough, expectorations, voice.

Abdomen—shape, thickness of wall, markings, distention, masses, tenderness, scars.

Genitals—formation, secretions, scars.

Extremities—deformities, scars, discolorations.

Groins—masses, sinuses.

Birthmarks, moles, etc.

Nails—texture, shape.

Teaching nurses how to use the five senses, in nursing as far as possible is an important part of the head nurse's duty. This method can be used in a great variety of conditions.

For Example.—Select an obstetrical patient and question the pupil nurses as to what they may learn about the conditions by using their eyes—in the first five days after delivery.

Seeing.—Is flow of blood from uterus normal or excessive?

Is sleep natural and restful or a state of unconsciousness due to internal hemorrhage?

Is facial expression normal?

Is color of skin healthy; amount of perspiration?

Is amount of urine voided normal?

Are external parts swollen and is swelling disappearing?

Is lochia normal for stage of recovery?

Presence of blood clots.

Are breasts distended, etc? Is secretion of breasts apparently normal?

Feeling.—Rate and consistency of pulse.

Condition of uterus as felt through abdominal wall. Distention to be expected.

Condition of breasts at different periods.

Rise of temperature may be suspected from touch.

Smelling.—Characteristic odor of lochia.

Deviation from normal odor as noted in decaying retained tissue that should have cast off.

Odor of breath or perspiration.

Unusual odor from bowel discharges and urine.

Hearing.—Note passage of flatus. Note what patient complains of in regard to pain.

Normal and abnormal pain. Note significance of faintness, dizziness, dimness of vision, etc.

The sense of taste is less used in nursing than are the other senses. It is a help chiefly in regard to matters of diet.

Much improvement has been made in regard to teaching obstetrical nursing but there is room for much more. The conditions described by a well-known superintendent[1] of a maternity hospital have not been entirely left behind.

"The head nurse almost always has other duties combined with her obstetric work; her nurses are under her instruction but a few weeks, and usually for only a few minutes each day, the visits of the 'attending man' usually resemble a draft along the corridor, and her support and fountain of information remain the interne, who stays the long period of six weeks in the service, and whose place is filled by another equally well supplied with obstetric knowledge and an obstetric technic.

"It is no wonder, in view of these things, that the nurse leaves the obstetric ward with a feeling of relief and often disgust. She has worked hard, has learned little, has obtained no enduring methods, has seen no ideals of practice and has attained none.

"A crying baby means peppermint water and nothing else; an incubator baby is a nightmare of blue spells; a puerpera means nothing more to her than castor oil and

[1] Mrs. Emma Koch.

external dressings, etc. She has not been taught to observe the daily changes occurring in the little being lying in the crib; she has not seen the earliest developments of the mind; the changes of the skin, of the intestinal tract, the circulation; the shape of head and body, and all the wonderful phenomena that go to make up life, and the preparation of the individual for an adult existence.

"She has not been taught to observe the wonderful workings of nature in the puerpera, the recession of the uterus, the changes in the lochia, the development of lactation, the fluctuation in the body functions.

"To her a labor is a long vigil of watching suffering, and a bewildered assisting at the delivery of the infant. The mighty occurrences in the labor are meaningless. The mechanism of labor, the protection nature gives the mother against infection and hemorrhage, the change of the child's life from intra- to extra-uterine, all these are thrilling and magnetic stories, but a closed book to her.

"The grandeur of the science of obstetrics thus being unknown to the nurse, and the practice of the art being so desultory and unsatisfactory, the nurse regards her obstetric training as a necessary punishment, and usually resolves, 'never to take obstetric cases when she gets out.' "

Clinical Course

When it can be arranged and a doctor can be found who is interested in conducting clinics for nurses a well worth while advance step has been made. Each doctor will arrange his own courses according to the patients available but the following outline of a Clinical Course may be suggestive:

"This course[1] is intended to give the nurse a compre-

[1] Given at City Hospital, Worcester, Mass.

hensive idea of how and why the doctor makes certain examinations, in order that she may be a more efficient and intelligent assistant, and to make her a better and more accurate observer by teaching her what she should observe, and giving her a definite and accurate idea of certain phenomena, the immediate and intelligent observation of which not infrequently means so much to the patient.

"A considerable number of more or less unimportant phenomena are introduced into the course as they present themselves, both to keep up interest and to bring into more marked contrast conditions of greater importance.

"No attempt is made to teach diagnosis, the whole object being to make the nurse a better and more accurate observer, a quicker and more consistent thinker, and a more resourceful and efficient helper to the physician both in the hospital and in private nursing.

"The class is divided into small sections, five or six pupil nurses in a section. One hour is allowed for each clinic. A talk of from five to ten minutes is given before the exercise, explaining the important points to be observed. Sufficient time for asking and answering questions and for discussion is allowed at the end of the hour.

"The first five exercises are given in regular order, the object being not to teach the pupil to diagnose any of the diseases shown, but to increase her powers of observation.

"These five exercises are on the circulatory and respiratory systems. Typical cases are always shown.

"FIRST CLINIC—NORMAL CHEST

"Two patients are used.

"A regular routine examination is made by instruction, including—

Inspection.
Palpation.

Percussion.

Auscultation.

"Each step is carefully explained, the nurses taking notes if they so desire. Each nurse repeats this examination herself and compares notes with the instructor. The object of this clinic is to show the nurse what is normal, and to emphasize the necessity of quiet during examinations.

"Proper positions are shown.

"Draping patient for examination is taught at this exercise.

SECOND CLINIC—HEART-SOUNDS

"Murmurs.

"Aortic and pulmonic second sounds.

"This is a lesson in accuracy of observation.

"The nurses in order (without instruction other than that given at first exercise) palpate the heart apex, count the ribs, and write on paper where they consider the apex to be. This paper is immediately handed to instructor, notes are compared, and each nurse individually shown the correct method.

"Each nurse listens to one or more heart murmurs. No attempt at diagnosis is made.

"Each nurse listens in the pulmonic and aortic areas, and writes on paper which sound is louder, handing same to instructor at once. No discussion is allowed until all have examined patient. Those in error are then shown the cause of wrong observation.

"THIRD CLINIC—PULSE

"This being one of the most important exercises in the course, considerable care is used in selecting cases, and as there are constantly upward of 200 patients in the house, there is no difficulty in illustrating the variations in quality, etc., on typical cases.

"Each nurse palpates the radial, facial, temporal, carotid, dorsalis pedis, and brachial arteries in cases where the pulse is normal.

"A case of arteriosclerosis is shown and the artery palpated, and cause of findings explained.

"A tortuous artery is examined.

"On suitable cases the following characteristics are illustrated, and terms are explained:

Volume.
Tension.
Rate.
Rhythm.
Quick.
Dicrotic.
Well sustained.

"On other cases the nurses make the observations themselves, committing themselves on paper, and when all have made the examination, are corrected if wrong. The effect of fever in quickening and weakening the pulse is shown, and the increased tension in the two diseases, nephritis and arteriosclerosis, is illustrated. The irregular pulse of myocarditis and the irritable heart of certain nervous conditions is demonstrated. The slow pulse from pressure (head pulse) or as seen in meningitis, or under the influence of digitalis, is shown when possible.

"FOURTH CLINIC—RESPIRATORY AFFECTIONS; PNEUMONIA

"The nurses are taken to the bedside of an acute pneumonia case, after having been given a short talk on the disease, and asked to make a note of what they observe that is not normal. It is expected that they will notice the—

Face.
Respiration (rate and character).

Tracheal râles, if present.
Cough.
Character of sputum.
Temperature chart.

"The chest is inspected and the nurse expected to see any differences in the movements of the two sides, and to observe the intercostal spaces on both sides carefully for alterations from normal. Tactile fremitus is felt. Difference in percussion-note is demonstrated. Vocal fremitus, bronchial breathing, whispered voice, and râles are listened to. The above exercise is given in a way to impress the nurse that to observe accurately, the whole attention must be on the matter in hand.

"FIFTH CLINIC—TUBERCULOSIS

"This exercise is intended to bring out more clearly the salient points of the preceding lesson. The same method is used as in exercise four, and results contrasted with those in that exercise. Less time is given to the clinical side of this disease, and more to the preliminary talk, especially to emphasize the importance of prophylaxis and the lines along which this should be carried out.

"The above five clinics are always given in order. Other exercises may, however, be put in between any of these if rare or especially interesting cases are in the house or an epidemic (as typhoid) is prevailing.

"The following exercises are given when the clinical material warrants, but not necessarily in the order below, although this order is preserved when possible:

"SIXTH CLINIC—PLEURISY WITH OR WITHOUT EFFUSION, AND EMPYEMA

"These conditions are shown on typical cases, the same plan being used as in above exercises. Aspiration is

shown when practicable, and the apparatus for tapping the chest is demonstrated, each nurse assembling and using it herself, that she may understand the principles of its action.

"SEVENTH CLINIC—TYPHOID FEVER

"Preliminary talk includes a few words on shape and size of bacteria in general. Source of infection and prophylaxis are emphasized, special reference being made to care of excreta in the city and in the country. Cause of mental condition and causes of death are explained, and the danger-signals of these latter conditions are dwelt upon.

"As many cases are shown as possible.

The appearance of the face noted.
Rose-spots shown.
Spleen palpated.
Temperature charts examined and changes in temperature and in pulse-rate explained.

"EIGHTH CLINIC—RHEUMATISM

"As many types of rheumatism and rheumatoid affections as can be obtained at the time are shown. The dangers and signs of danger are emphasized, especially regarding the heart. The untoward effects of certain antirheumatic drugs are illustrated when possible, and considerable emphasis placed on the signs and symptoms that may be caused by these medicines. The writer has seen more or less severe stomach trouble and annoying ear complications arise where these drugs were being forced and where the physician was depending on the nurse for warning of untoward effects.

'An endeavor is made to show the following:

Rheumatic fever.

Rheumatism.
Acute.
Subacute.
Chronic.
Sciatica.
Lumbago.

"A typhoid knee was shown a year ago.

"NINTH CLINIC—NERVOUS DISEASES

"The following diseases were shown last year. The characteristic signs and symptoms were brought out clearly and the nurse expected to note the variations from normal:

Apoplexy.
Tabes dorsalis.
Chorea.

"TENTH CLINIC—SKIN DISEASES

"When it can be properly done, erysipelas, impetigo contagiosa, scabies, and a case of eczema are shown.

"ELEVENTH CLINIC—GLANDULAR DISEASES

"Diseases of this type are shown where practicable. Special attention is given to glandular enlargement due to syphilis, tuberculosis, and to pediculosis. A case of glanders (farcy type) was shown last year.

"TWELFTH CLINIC—MENINGITIS

"Meningeal cases are shown if practicable.

"THIRTEENTH CLINIC—ANEMIA

"Last year we were able to show primary pernicious anemia and secondary anemia from gastric hemorrhage in beds side by side. The hemoglobin estimation test with the Talquist scale was performed by each nurse. The nurses are also taught in this exercise, or in any other where there is time, to make blood smears, and also smears from the other secretions.

"FOURTEENTH CLINIC—CIRCULATION OF THE BLOOD IN A FROG

"This is shown in the web of a frog's foot under the microscope, each nurse actually seeing the blood flowing in an artery, seeing the artery break up into capillaries, and the capillaries again pour their blood into a vein. At this exercise the processes of inflammation are demonstrated. The nurse sees the blood-stream increase in rate of flow under slight irritation and slow up under continued irritation and finally stop. The inflammatory exudate is then examined under the microscope and its characteristics noted.

"At this exercise a nerve muscle preparation is made, using the gastrocnemius muscle of a frog. Muscle contraction, caused by direct irritation and by nerve stimulation, is demonstrated. A specimen of fresh blood is examined under the microscope.

"FIFTEENTH CLINIC—AUTOPSY ON A CAT

"A regular autopsy is performed on a cat. The nurses examine the organs, note their location, and are shown the various tissues which they have previously studied in their anatomy course. The larynx, eye, and tongue are demonstrated.

"In addition to the above, the following phenomena were shown during the course last year:

Tympanites.
Loss of liver dulness.
Abdominal retraction.
Edema.
Heart.
Kidneys.
Malignant disease.
Facial paralysis.
Nephritis.
Certain speech peculiarities.
Taches cérébrales.
Chill contrasted with chilly.
Gangrene.
Cyanoses.
Emphysema of chest-wall.
Stigmata.
Knee-jerk.
Rose-spots.
Ascites.
Bradycardia.
Tachycardia.
Palate reflex.
Tracheal râles.
Cheyne-Stokes respiration.
Linea albicans.
Facies.
Peritoneal.
Lead line.
Club-fingers.
Jaundice.
Satiny skin of alcoholism.
Uremic coma.
Drug-rash.
Enlarged liver.
Litten's phenomenon.
Goiter.
Babinski's sign.
Ankle clonus.
Incoördinate movements.
Visible peristalsis.
Purpura simplex.
Erythema nodosum.
Angioneurotic edema."

FOR DISCUSSION

What can a conscientious head nurse do to better prepare herself to do effective bedside teaching?

Describe some cases in which it seems necessary or desirable for a pupil nurse not to know what the diagnosis is in regard to her patients. Mention the disadvantages from an educational standpoint of having the diagnosis withheld from pupils?

A certain well-to-do patient was admitted to a hospital suffering from a venereal disease. The nurses who cared for him were not told the nature of his disease. Discuss this incident from the standpoint of the nurses, and the other patients they were caring for. Whose

fault was it that this diagnosis was not mentioned. What responsibility has a head nurse when she knows or has strong reason for suspecting such a disease yet is told not to announce it. How should such a matter be handled by the head nurse?

Give an outline of what a head nurse might teach in one week in a medical ward containing six typhoid fever patients, two nephritis patients, one pneumonia, one pernicious anemia, one apoplexy, one gastritis.

Describe some of the opportunities which a nurse has of doing preventive teaching in the ordinary ward.

What should a pupil nurse be taught before she is allowed to care for a maternity patient and newborn infant.

CHAPTER XX

Bedside Teaching (*continued*)

One of the first lessons a nurse should be taught is that the chief secret of rapid effective bedside work is in getting everything ready before beginning a nursing procedure. In certain duties it may be necessary at first to make a written list of the articles required and have the probationers memorize it. The following description in regard to teaching catheterization illustrates a good method to follow in practical teaching in general.

Catheterization.[1]—"The way to do a demonstration of a catheterization, for instance, is on the same lines as one teaches the multiplication table, with actual objects, and with questions taxing the pupil's mind, coming at the same problem from every possible angle: (1) The pupil's herself, (2) the other pupil's assistance and supervision, (3) the patient's for whom it is given, (4) the patient's in the next bed, (5) the neighbors' across the court or street, (6) the physician's, with his special foibles.

"The teacher must show the pupil a sketch of the part to be treated, and talk with her about:

1. What the patient complains of.
2. Her history.
3. What needs to be done.
4. Where it is to be done.
5. What parts are adjacent and might be injured.
6. Asepsis and the reason for it.
7. The pupil's own idea of how it should be done.

[1] Amy Armour Smith in The Trained Nurse and Hospital Review.

"Then the teacher gives the pupil a list as follows:

1. What the articles are and testing them—broken glass, defective rubber.
2. Where they are kept.
3. In what order they will be carried to the bedside and used.
4. The preparation of these articles and solutions.
5. The preparation of the patient, draping, etc.
6. The special features of the treatment for this case; for instance, if it is a specimen to be saved.
7. *The preparation of the nurse's hand.*

"The teacher in this stage emphasizes:

1. The need of pulling down the shades and getting screens and a drop-light.
2. The reason for boiling many catheters.
3. The distinction between labor cases and other female patients and male patients, for using rubber and glass catheters.
4. The examination of the parts, to find the meatus and be sure of it, before scrubbing up.
5. The need of boiling catheters in a cloth to protect them.
6. The time, by the watch, required to scrub up.
7. The way to keep the hands clean going to the patient.
8. The damage of bichlorid, etc., and the arithmetic of the solution.
9. The position of the bedside table to her right.

During the treatment the demonstrator shows:

1. The method of washing downward and not reversing the sponges.
2. The thorough cleansing.
3. The direction for the catheter.
4. The protection of the distal end of it.
5. The advantage of short, 6-inch catheters.
6. The absence of pressure.
7. The nature of the urine.
8. The danger of removing too much.
9. The after-cleansing.
10. The methodical disposition of the articles on the table.

"Following this, one should pause and ask for the need of the treatment in its bearing now especially to the physician and the laboratory.

"The nurses are trained in alertness by asking:

1. Why was this ordered catheterized?
2. Why cannot the patient void?
3. What shall we put it in?
4. How much did we withdraw?
5. Must all of it be saved?
6. How is it recorded on the chart?

"The next step, which greatly affects the harmony of the ward force and the speed with which they work, is putting things away properly—and the teacher must have this *planned* and do it, not walk off and leave it to the pupils, for they will then think they, too, may do the same:

1. Wash and boil the catheters and dry by draining, then powder.
2. Scrub and dry basins.
3. Measure specimen, transfer to sterile specimen bottle, cover label and take at once to the laboratory.
4. Scrub hands, as before.
5. Chart the treatment.
6. Leave patient comfortable.

"This demonstration must be followed by the pupil doing the same treatment, the supervisor being present from start to finish."

Water is the only remedy that is found everywhere. It is applied to a wider range of diseases than any other remedy. It is a safer remedy than any other for a nurse to use in a great many emergencies which she will have to meet. In most cases its success as a remedial agent depends on attention to the minutest details. Whether it is used in the form of ice, or steam, or in its liquid state, whether it is applied hot or cold, its chances of success may easily be defeated by ignorant or careless management.

If water is to be applied intelligently and the best results are to be produced, systematic and careful

instruction, accompanied by demonstration of correct methods, should certainly be given. The pupil nurses should understand something of the physiologic effects of external and internal applications of water, when it should and should not be used. It is well known that effects vary according to the mode of application, the duration of the treatment, the temperature of the water used, and also the temperature of the room in which the application is made. But there are a great many nurses sent out as graduates who could not state with any degree of confidence or accuracy the degrees of temperature at which a bath might be classed as cold, cool, tepid, warm, or hot.

The sponge bath to reduce temperature is, next to the cleansing bath, the form of bath most frequently given by nurses. Long before it is possible in their formal class-room work for them to get instruction in hydrotherapy, the head nurse can in their bedside work call attention to important details which they will miss otherwise.

Why do we apply water externally in treating fevers? There are several reasons which should be brought out.

What points should a nurse especially remember in giving baths for fever? What should she be careful to avoid?

What, in short, is the treatment she is giving aimed to do, and how may she by her blundering defeat the purpose?

The handling of medicines is one of the commonest every-day nursing duties. The fact that familiarity with drugs is apt to lead to carelessness in handling; the fact that every year there are deaths chronicled which are due to mistakes in handling drugs, should serve to make every head nurse vigilant in watching to prevent errors, and *diligent in teaching what and what not to do*—repeating

the lesson and giving it fresh emphasis each time it is told.

How do most mistakes occur? That is an important thing to teach. Forewarned is forearmed.

The commonest way is by not reading the label, by reading it carelessly or when thinking of something else, but there are numerous other ways. (See page 272.)

Mistakes in the arithmetic of medicine are common. A good deal of time should be spent in drilling in regard to fractional dosage. Definite problems should be given to be worked out. For example: If one-fortieth grain of strychnia sulphate is ordered and the nurse has only one-thirtieth grain tablets how shall she reckon the correct amount?

If she is ordered to give twenty grains of potassium acetate and the stock bottle is marked grs. V = ℥i how much should she give?

How Accidents Occur.—The precautions that should be observed by nurses in regard to drugs—ways and means of preventing accident, reports on carelessness in this matter that some head nurse has noted, may wisely constitute a subject for periodical conference between the principal and head nurse. The consequences for the nurse herself when a patient dies from her mistakes, are so disastrous that too much emphasis can hardly be given to this subject.

The hypodermic needle, its uses and its care—how a nurse's bungling or carelessness with a leaky syringe may defeat the object of the treatment may wisely be given some emphasis by every head nurse.

"Frequent complaints are made by ophthalmologists in even the best of hospitals about the quality and preparation of the valuable drugs they must use, whose effectiveness is marred by one degree temperature too high or too low, or by being produced from an inferior

source. This complaint should be respected up to the point where either grade of drug produced the same results, since the surgeon is so earnest, the eye so valuable and the patient so powerless." Teach nurses the need of special caution in regard to eye-droppers, lotions, and all appliances that have to do with the eye.

"There are many peculiarities about the administration of drugs, which, if not known, would make them ineffectual or injurious. Each new drug ordered should be read up, and the special features noted:

Iodine—to be given on loaf sugar.

Turpentine—by mouth, on sugar; by rectum, emulsified drop by drop in an oil.

Iron—with a drinking tube, in syrupy vehicles, far back in the mouth.

Licorice powder—dissolved first in whiskey.

Creosotal—in warm milk.

Lassar's paste, or Cantharides—shave the part.

Pills—offered on a spoon, never in the nurse's fingers.

Powders—laid on the tongue.

Mercury inunctions follow a regular schedule: Right axilla, left groin, left axilla, right groin, the nurse wearing a glove.

The alert pupil who asks about all drugs is as valuable as the old nurse with experience in only a few."

Taking things for granted often leads to humiliating, if not disastrous mistakes. Even though nurses are carefully taught in class about methods of administration of various drugs, it is expecting too much to think they will remember the lessons learned without repetition and in many cases without demonstration. For example. A young superintendent who was instructing her class of nurses, using one of the standard text-books, passed over the subject of suppositories in class with a casual mention of their uses. One nurse at least, in the

class, had never seen a suppository, and had but a very vague idea of what the thing was. It so happened that a year or more passed before she was ordered to give a suppository, and before that time all that teacher and text-book had said about the things had passed from her mind. If the teacher had shown a suppository and had given one before the class, she would have been likely to remember what she saw. The suppository was sent to her to give, and the superintendent, to her dismay and humiliation, learned afterward that the nurse had taken the suppository to the patient in a teaspoon on a little tray with a glass of water and tried to make the patient swallow it. The nurse who did that is married now, and out of active practice as a nurse, but from stories heard there are nurses still in hospitals and elsewhere who have made precisely the same blunder. The remedy for that kind of blunder is greater thoroughness in teaching and the practical demonstration, so far as possible, of the methods to be used.

So many points enter into the successful administration of enemata, and such important results are dependent, many times, on their skilful administration, that too much pains cannot be taken by head nurses to review the instruction given in class, and to emphasize the exact points to be observed in giving different classes of enemata. When a nurse is obliged to give an enema to a male patient, as so frequently happens, definite instruction should be given as to points to observe and points to avoid. This task a nurse will usually have to do when on private duty, and the failure of the training school to give definite teaching in regard to such matters often leads to embarrassing results. A doctor who told the author the following incident, vouches for its truth. A nurse, shortly after graduation responded to a call to nurse a mild case of small-pox. The patient

was a young man. The doctor ordered a soapsuds enema and the nurse proceeded to get it ready. She brought it to the bedside in the fountain syringe, set it on the bedside table, and told the young man he was to take it, which he did. The results were not as expected and the doctor told her to repeat the injection. She prepared another and again brought it to the bedside, telling the patient that the first one had not had the expected results and he had to take another. "Not on your life," responded the patient. "I had an awful time getting that first one down; I thought surely I would vomit it, and I'm not going to take another. You give a fellow too much. I'll tell the doctor myself when he comes that it was my fault that I didn't take it." Of course the training school expected that a nurse would know better than to blunder in this way—it came from taking things for granted. The principal or instructor did not mention the matter of giving such treatments to male patients. The orderly always gave them in the hospital. The head nurse overlooked it, and the nurse lacked imagination. She was prudish to the point of making herself ridiculous, and her patients would have to endure the consequences.

The Gynecologic Ward.—No ward offers greater opportunities for effective bedside teaching than the gynecologic ward. In it may be demonstrated a great variety of the nursing procedures in which nurses are expected to become expert and often are not.

The aseptic technic which is the foundation of a nurse's operating room work can be and should be taught and demonstrated in doing ward dressings. Breaks in technic can be corrected. Reasons why various details are so important can be explained. Here again the successful head nurse will teach as far as possible by asking questions—drawing out what the pupil knows and

illustrating it by some condition in the wards. Her work is not so much to "spoon feed" with knowledge, as to stimulate pupils to ask questions or to send them to find out something they should know.

How may a nurse's bungling undo the work of a surgeon in certain kinds of plastic work?

Why do stitch abscesses occur?

When treating a case for cystitis why not ask a nurse to find out several causes which predispose to this condition.

Why are tampons used? When may they do harm rather than good? Etc.

Gynecologic Examinations.—A point on which many nurses are weak is in not knowing how to place patients in the different positions for examination. Such examinations are too often conducted without any method on the part of the nurse, because of imperfect teaching at this point. A clinical demonstration should explain these points clearly to every nurse, so that she fully understands what her duties are under the circumstances. The methods of examination should be first explained. These may be classed, for convenience, into non-instrumental and instrumental. The non-instrumental methods include inspection of external genitals, external abdominal examination, bimanual examination, rectal examination. The class should be shown how to put a patient in the various positions for these examinations. A very sensible practical test of a nurse's progress along these lines would be to require each nurse at different times to put a patient in Sims', lithotomy, knee-chest, upright, dorsal, Edebohls', and Trendelenburg's position. She might be able to write down how it ought to be done, and yet not be able to do it promptly, properly, and with the least exposure of the patient.

The instruments necessary for instrumental examina-

tions, or for use in vaginal work in removing sutures from the cervix, etc., should be shown in this lesson. The difference between the spatular speculum, commonly known as Sims', and the bivalve speculum should be explained. Instruction should be given as to how to assist a physician in instrumental examinations. The preparation for an intra-uterine douche, how to arrange the patient, and help the doctor during its administration should not be overlooked.

In a future lesson, the method of preparing a patient for gynecologic operations, both abdominal and vaginal, should be shown by practical demonstration, even if the regular nurses of the hospital are not required or allowed to do this work, or if it is always done in the operating room. An illustration from a post-graduate school will emphasize this point. A nurse in private practice came with a patient to the hospital as a special nurse. The case was one of multiple fibroids, to be operated on through the abdomen. The surgeon gave directions for preparing the abdomen—the shaving, scrubbing, compress, etc. The nurse was a graduate of one of the oldest, largest, and best-organized hospitals of the Eastern States. So far as the post-operative care was concerned, she was all that could be desired. But she was obliged to come to the head nurse and confess that she had never prepared a patient for operation and did not know just how to go about it. This happened a few years ago. Perhaps it could not happen now, but it serves to show the need of every superintendent making a business of seeing that her nurses get practical instruction along these lines.

Such a demonstration as has been suggested might conclude with methods of preparation and application of tampons and adjustment of abdominal and perineal bandages. Not a few wounds become infected because

the nurse either has not been instructed as to how to adjust such bandages, or because she neglects to keep watch that they remain in position.

Teaching what not to do is often quite as important as what to do and how to do it. For example: A nurse who had been admitted to a hospital for post-graduate training was sent to give a douche to a patient by way of preparation for a vaginal operation. A few minutes before the clinic hour the head nurse was amazed to find that the douche had been given without having removed a filthy, odorous tampon, the strings of which were plainly visible; indeed, the tampon was in the way of the insertion of the nozzle. This nurse was a graduate of a prominent hospital in one of the Central States.

The orthopedic ward is another important point in the hospital that should be utilized much more than it is for bedside teaching. The disastrous epidemic of infantile paralysis has resulted in a considerable number of nurses being called to follow up such cases in the homes to see that the little victim has the best possible chance to recover from the crippling effects of the disease. In this as in so many other conditions success comes as the result of attention to small details that are easily overlooked.

FOR DISCUSSION

Mention some points which a head nurse should emphasize when giving instruction regarding catheterization.

Suggest teaching points that come in the ordinary course of giving sponge baths to reduce temperature—points which junior nurses would be apt to overlook.

Mention ten ways in which accidents may easily occur in the handling of drugs by nurses with suggestions as to how to teach prevention of such accidents.

Discuss the questions of giving enemata to male patients by nurses —also points which should be observed when this duty becomes necessary.

Suggest a list of questions which a head nurse in a gynecologic ward might use in calling the pupil's attention to points to notice in caring for a trachelorrhaphy case, a hysterectomy, an operation for removal of breast, an operation for uterine prolapse.

Outline the instruction which a head nurse should give to a pupil who is caring for a case of infantile paralysis, a fracture of the femur, a case of amputation of the leg below the knee—special points to observe in each case.

CHAPTER XXI

Ward Housekeeping and General Management

In the general management of a large ward or a section of a hospital a head nurse will find ample opportunity for the exercise of both technical and executive ability. The nurse whose professional education has been built on the solid foundation of a thorough practical knowledge of housekeeping is, as a rule, better fitted to fill such a position than the woman without practical domestic experience. It is not unnatural that a feeling of bewilderment should take possession of even the most self-possessed nurse who finds herself thrust into such a position in a hospital to which she is a stranger, but a couple of days in the place will make a decided change in this respect, and a couple of weeks ought to see the clouds disappearing entirely from her horizon. She should begin to see the situation clearly.

When the Staff Changes.—From the very beginning the head nurse will do well, even though it may not be a rule in that particular hospital, to be always at her post when the nursing staff changes. Only thus can she be sure that the orders will receive prompt attention; that appliances used by the staff going off duty are all in their proper places; that the entire department of which she is in charge is in order; that the work for the next relay starts out as it should. The very fact that she is there and notices such details will have a good effect in keeping up standards of work.

To make a careful observation of the standing orders will perhaps be her first duty—the orders and rules that apply to her, those that apply to the nurses she will direct. After that will come the looking over the records and the details of the ward in general. It is well for her to understand that there is no detail that may pertain to the comfort of the patients or the general well-being of the ward for which it is not her business to be responsible—nothing so small that she can afford to be careless about it. No nurse should be allowed to get the idea that the head nurse is "interfering" if she inquires into some detail concerning a patient or condition. It is a very important part of her business to "*interfere*" when occasion demands it.

The periodic supervision of the condition of the beds is one matter that head nurses are inclined to overlook. It may as well be taken for granted that there will always be nurses who, regardless of how thoroughly they have been taught, will be careless about their bedmaking if they are allowed to be. In beds on which the spread is straight and neat, beds which to the superficial observer appear to be up to the mark, it will often be found that three or four days after an operation the operating room stockings are still in a heap at the foot of the bed, and the towel that was pinned in place to protect the sheet while the patient was recovering from the anesthetic is still there under the pillows, showing that the bed has not been thoroughly made in that time. At other times crumbs will be found, increasing the discomfort of a patient already worn with pain and restlessness.

The Trays.—Another matter that demands careful supervision is the trays. For that reason it is highly important that a head nurse should always be in her ward when regular meals are served, to note the appetite of the patients, to be sure that helpless patients or those

confined to a recumbent position are either fed or have the food given to them, so that they can take it with the greatest ease possible for them. On a visit to a typhoid-fever patient in a private room recently he was found with a good slice of broiled steak (which he was allowed to chew) cooling before him. He was absolutely confined to the recumbent position, and the thoughtless nurse had simply carried the piece of steak as it came from the kitchen, set it on the table, and walked out without cutting it or in any way attempting to fix it so he could eat it. There are a great many thoughtless pupil nurses in the training schools of to-day, nurses who might be expected to display more real ability in managing such things than they do. It is not enough that they are taught how and when a thing should be done, but some one must be on hand to see that it is done.

How is the head nurse to do this, if physicians persist in coming at mealtime to make their rounds? In some of the leading hospitals in New York there is a standing rule posted in conspicuous places to the effect that no physician who comes to do dressings or make rounds at mealtimes (the regular hours) is entitled to the assistance of a nurse. It is a wise measure that should be observed in every hospital. Once the doctors understand that such a rule is there and will be enforced, they will adjust their hours to more convenient times.

The preparation of the diet-sheet is another duty that falls to the head nurse. Usually these are prepared at night, sent to the superintendent to be signed, and when the sheets from all the departments are collected, the quantities are aggregated and sent to the housekeeper or dietitian. There are some few of the head nurse's duties that may safely be left to pupil nurses, but this is not one of them. Not long since a superintendent found that a head nurse was actually requiring a proba-

tioner, as a routine practice, to make out the diet-sheets and order the supplies for the ward, while she attended to what she considered more important duties.

If a patient is not eating the food he is expected to eat it is the head nurse's business to know it, and to find out the reason. This kind of knowledge has or should influence the diet sheet. Submitting the menu in advance and allowing patients to choose has proven a satisfactory remedy for much complaint about food and has resulted in material saving.

In regard to bed-linen a good deal of care needs to be exercised. There has been, of late years, an outcry from private homes about the extravagance of nurses regarding linen, a fault for which our hospitals are mainly responsible. There is a happy medium to be aimed at in this matter. Too great economy is never commendable, neither is extravagance. The laundry work in a hospital is always a heavy item. An investigation recently as to the reason for the constant cry of shortage of linen in a certain hospital showed that some nurses changed beds every time they gave a patient a bath, whether the linen was soiled or not. Clean folded sheets were used as pads under bed-pans, and for various other irregular purposes, while the same kind of extravagance was discovered in the matter of towels. All the time the head nurse was there, seeing about treatments, personally directing the nurses in some matters, and entirely ignoring the question of linen, as though it was something for which she had no responsibility.

In the matter of household work and cleaning a head nurse will save herself much needless anxiety by making out a schedule covering the entire department of which she has charge, and stating definitely the work to be done each day and the hour at which it is expected to be completed. Only thus can she hope to keep her section in

good condition. If ward maids or nurses find that it makes no difference whether they sweep or dust before noon or after, embarrassments will constantly occur. When this schedule has not been made out, it has happened that the ward has been undergoing a sweeping while the patients' dinners were being served—an actual fact, in this age of supposed sanitary intelligence! It is well also to remember that once duties have been assigned to Jane, they are not to be performed by Maria or Peter, even if Maria and Peter are good-natured enough to offer to do them. Ten chances to one Maria and Peter are themselves neglecting something on their own schedule while they are posing as kind-hearted individuals where they do not belong. When a heavy day comes, the effect of good or bad management in this respect will be most in evidence.

The necessity of having a place for everything, and insisting that it be kept there when not in use, is another matter that requires frequent emphasis. Valuable time is wasted, tempers are ruffled, harsh words are spoken, often, because this rule is not adhered to in some hospitals. A night nurse, for instance, uses a hypodermic syringe or a roll of adhesive plaster, drops it somewhere, and forgets about it. The day nurse comes on, thinks she can go immediately and put her hand on it, and has to chase hither and thither searching for the missing article. Hypodermic needles are left without wires, and next time they are needed a new needle has to be sent for. When these things occur the fault lies very largely with the head nurses. They do not hold nurses strictly to account for these things or follow up till they find the delinquent.

The daily inspection of refrigerators, ward-lockers, table drawers, takes but a few minutes and goes a long way in keeping those out-of-sight corners in proper con-

dition. In the matter of plumbing, too great care cannot be exercised to see that dressings or other insoluble matter are not allowed to obstruct the flow of water. Likewise the need of repairs should be promptly reported. When a screen is found broken, or a rocking-chair that needed but a screw to put it in order, a door that will not open or close properly, and a general run-down condition prevails, it is pretty plain evidence that the head nurse of that department is in the wrong place.

The Use of Screens.—A point that sadly needs calling attention to is in regard to the use of screens in wards. It would seem, from observation, that this laxity is more likely to be found in the large hospitals with large wards than in the smaller hospitals. Frequently the authorities of the hospital are to blame, in that they have not supplied easily movable screens, or enough of any kind, but it may safely be inferred that, if there was an urgent demand for more screens, they would be provided. Many nurses are apt to be careless of this matter, and some will think nothing of giving a bath or exposing a patient for catheterization or a perineal dressing in a ward without a screen. Even in walking down the corridors of some hospitals a visitor will see ample evidence that laxity of this kind is far too common. It is bad for the nurse herself to allow her to be so careless, and it is certainly not conducive to the comfort of the average patient to be thus exposed.

The abuse of hospital supplies and appliances is one of the very frequent complaints heard. Wilful extravagance is not unusual. So many nurses feel that because the property belongs to a corporation it can make little difference to any one whether they are careless or not. A saving of five cents a day for each patient—five cents only—on the total supplies of food, drugs, surgical supplies, appliances, linen, etc., would go far toward

saving a hospital from having each year to report a deficit. This is another point on which much depends on the head nurse. Eternal vigilance, with careful accounting for supplies, is the only way by which those addicted to such carelessness can be made to feel their responsibility for the proper use of the supplies provided.

Precautions About Drugs.—Every now and then announcement is made of the poisoning of a patient in a hospital by a wrong dose of medicine. No head nurse who appreciates her responsibility will ever allow herself to be guilty of carelessness where drugs are concerned. Neither will she tolerate carelessness in the nurses whom she directs. There are a few lessons that need to be repeated seventy times seven or oftener in a nurse's course. One of these lessons is regarding the precautions to be used in the handling of drugs. Teach them first that there is an element of danger in every drug; teach them never to give or use a drug of any kind that is not labelled; never to give a drug in the dark; never to omit reading the label carefully and measuring the dose accurately; never to use a pill or capsule that has escaped accidentally from its container; never to give a medicine they have a shadow of a doubt about; teach first, last, and all the time the necessity of being careful in reading the label.

Additional Safeguards.—A teacher of nurses suggests the following additional precautions:

"A working knowledge of drugs and their dosage, coupled with eternal vigilance in giving medicines, supplemented by the following devices and mechanical aids:

"A separate division in the medicine cabinet for all drugs of a markedly poisonous character; such drugs to be in specially colored bottles and boxes; each to be marked with '*Poison*' label.

"To eliminate, from the stock on the wards, such things as oxalic acid crystals, bichlorid tablets, pure carbolic acid, and all tablets of such strength that one tablet is a poisonous dose, *e. g.*, strychnia, gr. 1.

"Drug labels to be changed only by the pharmacist or person in charge of drug department. Labels to be shellacked, hypodermic bottles also, so that they will not be affected by water.

"Stock bichlorid solution, colored blue; carbolic acid, red.

"Medicine cabinets and drug cupboards to be well lighted.

"A good book on materia medica to be in every medicine cabinet for quick reference, and the pupils taught to refer to it before giving a new medicine.

"Materia medica taught in preliminary course. Pupils to be given actual practice in symbols, weighing, measuring, making up solutions, making out medicine lists, etc., before being allowed to give out medicines. Nurses to be taught that practically all drugs are poisonous if taken in sufficient quantity."

Team Work.—A point which has caused *embarrassment* in many hospitals has been the neglect on the part of the head nurse to notify the superintendent when she was leaving the hospital for a few hours or an afternoon off duty. This, common courtesy and justice to the work demand. No head nurse who is really fitted to direct others will be guilty of this failing, which is more than a breach of courtesy—it is a breach of trust. She requires her nurses to report to her at such times, and should be just as careful to observe the point herself.

These are but a few of the responsibilities that devolve on the head nurse. While a certain amount of individual choice is permissible in the management of the daily routine, she should remember her relation to the whole

institution, and establish no precedents that would create embarrassment if allowed in all departments; she should be extremely careful to observe general regulations that are made for head nurses or for the institution as a whole.

Team work is an essential to efficient service. No nurse is fitted for a head nurse's position who has not learned the art of working *under and over* and *with* other people without daily friction. If this is to be done every one must instinctively practise the small courtesies that serve as oil to the institutional machinery.

In the close contact which workers necessarily have in a hospital human frailties soon become known. No human being is without some failing or weakness yet most people have their good qualities which we often overlook because we exaggerate in our own minds their small weaknesses. Just lack of common courtesies in small things often lead to a head nurse becoming a discordant element in a harmonious group of workers with whom she might have worked happily had she been just a little more considerate in some details of conduct.

FOR DISCUSSION

A head nurse who was most capable had allowed herself to get into the habit of arousing suspicions in the minds of pupils that the principal made the work of her department much harder than was necessary.

Whenever the principal made a suggestion relating to the work of her department she was likely to suggest that "she need not try to interfere in my work." The principal had no authority to dismiss her. Her practical work was excellent. What attitude should the principal assume under such conditions. Is there any way of getting a head nurse to correct this bad habit? If so how should the effort be made—who should make it?

Give several reasons why a head nurse should always try to be in her place when the staff changes.

As a rule what are the first duties which a day head nurse in a surgical ward should attend to when she comes on duty in the morning?

A graduate special nurse who is on duty in a hospital is habitually

untidy and careless about her patient's room, and about hospital appliances. A fountain syringe is left by the special nurse in the utility room dirty, with the rectal nozzle unwashed, when another nurse needs to use it. Soiled dishes are constantly found in the diet-kitchen which pupil nurses are responsible for keeping clean and neat. Withered flowers are set outside the patient's room door in the hall for some one else to dispose of. How should the head nurse deal with this habit in the special nurse? How prevent pupil nurses from falling into careless habits with such an example before them?

Show why it is important for a head nurse not to ask a pupil nurse for directions about the work when she is uncertain as to how to proceed?

In beginning work as a head nurse in a new place what is the best way for the head nurse to get hold of the routine without consulting pupils?

One of the rules of a large and popular hotel is that when a difference occurs between a guest and an employee regarding service—the guest is always right: To what extent might such a rule be adopted in regard to nurses and patients. What would be the general effects of such a rule in a hospital?

CHAPTER XXII

Orders and Records

To have the orders written so clearly and plainly that they are easily understood is the first step toward having them carried out. This is another of the important duties of the head nurse. The orders actually given by the physician constitute but a small part of the treatment actually required. In most hospitals there are "standing orders"—general instructions to be observed in regard to all patients unless exceptions are definitely made for good reason. Years of experience with nurses—good, bad, and indifferent—have taught at least one superintendent that if good nursing is expected, the standing orders cannot be too full, too definite or explicit, or posted too conspicuously. One would naturally expect any nurse to know enough, for instance, to comb a female patient's hair every day without being told. It is only after repeated disappointments because of taking things for granted that superintendents have learned to include such commonplace duties in the standing orders, where the nurses cannot fail to see them frequently.

Lack of System.—When one sees the lack of system of writing orders that prevails in some hospitals the wonder is that any orders are carried out promptly and properly. Such carelessness, if it were to take place on a railway system, would cause the public to raise its hands in horror and appeal to the government to interfere. It may seem like laying a great burden on head nurses to say that the daily orders for each patient should be

written each day, but it is the only safe rule to follow regarding hospital orders where acute cases are being handled. If the ward is devoted to chronic cases, or ambulant cases, or convalescents, perhaps such rulings might be relaxed; and yet, we all admit that the period of convalescence is fraught with many dangers; but, with the active service that is now the rule in general hospitals where life and death are always in the balance, too great care and supervision over orders cannot be exercised. The method used varies greatly. In some hospitals an order-sheet is attached to each chart. In others the orders are collected from the separate order-sheets and are arranged with the standing orders for each patient that are to be specially observed that day, and transcribed in a book. In others a separate medicine list is kept.

After a trial of several different methods the system of having a record-sheet kept for every patient from the time he enters the hospital, with a space at the bottom of each sheet for the physician's orders, has been found by far the the most satisfactory. Separate order-sheets for the physicians are very likely to become detached and to accumulate and make the chart cumbersome to handle. The pupil nurse is responsible for executing the orders written in the order-book by the head nurse. The head nurse is responsible for taking down the physician's orders if he will not write them himself on the space for that purpose at the bottom of each sheet, and for transcribing them in the general order-book. While this latter method may take more time, it is the surest and best method, especially in dealing with probationers or inexperienced nurses. Instead of having to handle half a dozen or a dozen chart files to see what her duties are, the pupil nurse finds her orders grouped together in one book and can check off each order as it has been attended

to. Thus John Smith may need to have his temperature taken every two or three hours, while John Jones, in the next bed, requires it only morning and evening. John Smith may have to be bathed every day or every few hours, John Jones but twice a week. When the standing orders say that each patient must have a bath twice a week, it might be expected that John Jones would get his bath without further orders, but it has been found that Saturday has come without John Jones having had his first bath for the week, when his second one should have been due. Therefore it behooves the head nurse who wants good, prompt nursing to state in the orders for the day that John Jones must get his bath this day. A specimen order might read as follows:

JOHN JONES: T. P. R. q. 3h.: 8–11–2–5.
Bath this A.M. Fluid diet: milk, 3 ounces, with lime-water, 1 ounce, alternating with chicken-broth, 3 ounces q. 2h.: 6–8–10–12–2–4.
S. S. enema A.M.; Strych., gr. $\frac{1}{40}$, hypo., 12 and 6. Measure urine. Prepare for clinic at 2 P.M.

STANDARDIZED STANDING ORDERS

An increasing number of hospital schools are finding it of very decided advantage to have detailed standing orders for each department printed or typewritten and kept in loose-leaf book form.

The following specimen orders are suggestive of the methods used in different departments.[1]

General Orders.—Before sending patient's chart to the office, arrange it in the proper order.

Events of importance, as the admission of new patients, deaths and operations which occur after the superin-

[1] From Hospital for Sick Children, Toronto, Canada.

tendent has taken the night report, should be reported to her office before 7 P.M.

Record in the day or night report book if friends have been notified of a patient's serious condition, and whether they responded. If the patient is a Catholic, record if the priest has attended him.

Urinalysis.—1. All urine must be sent to the pathological laboratory by 8.30 A.M. 2. Samples to be properly labelled and marked: Admission, special, anesthetic, post-anesthetic. 3. Post-anesthetic urine to be sent day following the operation. 4. "Special" analysis slips to be filled out by resident doctor on service. 5. All swabs or cultures to be made by the pathologist, and notice given him when such are to be taken. 6. Samples sent down other than the above will be thrown out. 7. Specimen of urine to be obtained from every new patient, also before every operation.

Histories.—After a patient is discharged, the history should be arranged in the following manner and sent to the office: 1. Doctor's history notes. 2. Photographs or charts. 3. Temperature records. 4. Weight records. 5. Treatment records.

Each of these divisions should be arranged in order, beginning with the day of admittance and ending with that of discharge.

Each history should be initialed by the resident doctor before taking it to the office.

Four hour temperature charts are to be kept for every patient, whose temperature is being taken every four hours, and morning and evening charts in every case.

Summaries are to be made at 12 noon, and not at midnight.

The hours are to be charted from 1 to 24 o'clock.

Murphy's Saline.—Give with irrigating can and douche nozzle. 1. Warm saline .01 in can. 2. Put bottle of

hot water in can. 3. Place can so that top of saline will be at the same level as bed. 4. Coil tubing on hot-water bag in bed at side of patient. 5. Notice if saline drops from nozzle when held at same height as when inserted. 6. Insert nozzle about three inches into rectum. 7. Keep saline in can on level with bed by adding small amounts of saline frequently or by putting magazines under can—one about every half hour.

Saline should drip slowly but constantly. When properly adjusted and absorbed, patient gets about one pint every three hours.

Preparation of Catheter for Catheterization.—Always have ready two catheters, in case one should be rendered unfit by coming in contact with an unsterile surface.

To prepare them, boil for five minutes, take them to the bedside in the same water and basin, placing the basin on a tray, covering it with a sterile towel.

Catheters to be cleaned after use with soap and water, boiled in the same manner as when being prepared for use.

Always boil five minutes after boiling has commenced, not from the time the catheter has been placed on to boil.

Glass catheters to be used always when at all possible.

Typhoid Precautions.—Articles such as rubber sheets, dishes, drinking tubes, bed-pans, syringes, thermometers and blankets are to be kept for the exclusive use of typhoid patients.

Linen.—Bed clothing is to be put directly into laundry bags with red mark I when taken off bed, before sending to laundry. Cotton blankets are to be treated same as bed linen; woolen blankets fumigated with formaldehyd before sending to laundry. Mattress and pillows are to be steam sterilized when through using.

The nurse must not hold clothing against her person,

after removing it from the bed, and must avoid shaking it.

Evacuations.—The amount and character of all evacuations are to be recorded on chart.

Evidences of feces on patient's skin are to be removed by washing with castile soap, water and absorbent cotton; the cotton to be carbolized before putting into dresser's bag.

Tray.—One receptacle with puffs.

Castile soap.

One medium-sized basin for water.

Enema points and rectal tubes are to be thoroughly scrubbed with soap and water, and then boiled before using and kept in carbolic solution 1–20.

Nurse's Hands.—After caring for typhoid patients, nurses must thoroughly disinfect hands in bichlorid 1–2000, scrub with green soap and water, dry and apply hand lotion.

Table for hand disinfection:

Bowl—bichlorid solution 1–2000;
Nail brushes } in basin of bichlorid solu-
Orange wood sticks } tion 1–2000;
Green soap;
Hand lotion;
Towels.

The Mouth is to be washed after each nourishment.

Typhoid mouth wash:

Boric acid crystals	℥ iiss
Glycerine	℥ i
Listerine	℥ iii
Water q. s. ad	℥ viii

Mouth Wash Tray.—Glass with applicator's wound with absorbent cotton.

Cold cream for dry lips.

Medicine glass for mouth wash.

Tooth picks.

Pus basin.

Method.—Cotton is to be wrapped around end of applicator and dipped into mouth wash; the mouth is to be thoroughly swabbed and the applicator put into dish of carbolic acid solution after use.

Special Typhoid Precautions.—Until the diagnosis of typhoid fever has been confirmed, the above precautions are to be carried out and, in addition, all articles mentioned must be reserved for the *exclusive* use of such a patient.

Routine Orders for Contagious Duty

Supplies.—Supplies of all kinds are to be ordered through the nurse in O. P. D. The various lists must be in readiness each morning by 8 o'clock. The nurses are responsible for the economical use of all supplies.

Flies and Other Insects.—Kill all flies, mosquitoes and other insects in the room. Windows must be screened.

Disinfection of Bed Linen.—When clothes are removed from the bed they are to be put immediately into the bags for clothing which are marked "I" and taken to the sterilizing room by the orderly.

Fumigation.—Burn all papers, books, toys and magazines. Open closets and drawers; hang blankets, spreads, linen and clothing over screens; as formalin fumigation is only a surface fumigation, therefore, each article must be completely exposed. Seal registers and ventilators, pack doors and windows, and paste with newspaper.

Dishes.—All basins, bed-pans, urinals must be steam sterilized in utensil sterilizers and thoroughly washed with hot water and soap. Dishes for food must be boiled or sterilized in dish sterilizers.

Pharmacy.—All bottles must be washed off with carbolic 1–20 before being sent to pharmacy.

Wards.—Sweep with cloth wrung out of carbolic 1–40. Doors of wards are never to be left open.

Letters and Postals.—These must be sterilized. Scarlet fever patients are not to write letters themselves.

Telephone.—Disinfect transmitter night and morning. If required to use telephone while waiting on a patient, protect receiver with towel. All messages are to be telephoned and are not to be sent in any other way.

To Clear Out Odor of Formalin.—When formaldehyd gas is used for fumigating a room, the odor may be cleared out by letting ammonia evaporate or spraying the room with it.

Transfer of Patients.—No patient is to be transferred without first notifying the superintendent. Permission being granted, notify at once the ward to which the patient is assigned.

Discharge of Patient.—When a patient is to be discharged, notify main office at once; patient to remain until office approves. Before a patient is transferred or discharged, give bath, including hair, in bichlorid 1–5000, followed by bath of clear water; mouth, ears, eyes and nose to be wiped out with boracic acid, 4 per cent.; pay special attention to the nails. The patient is then transferred to the O. P. D. rolled in a clean blanket, where the nurse in charge dresses him in clean clothes, and is discharged from there.

Charts must be fumigated and sent to main office.

Rules for Nurse in Charge of Suspected Cases.—1. In case of rash or sore throat, she shall notify the house physician or house surgeon in charge of patient at once.

2. Screen the bed of patient.

3. Nurse attending patient shall wear a gown and gloves, or wash hands thoroughly with soap after each attendance.

4. No patient shall be admitted or discharged from

the ward until patient is seen by the house physician or house surgeon.

5. All dishes must be boiled.

To Avoid Taking and Carrying Infection.—Keep fingers, pencils, pins, labels, and everything out of your mouth.

Keep and use your own drinking glass.

Do not kiss a patient.

Wash hands frequently, always after handling a patient in any way, and before eating.

Keep out of doors as much as possible, and always sleep with window open.

Do not touch face or head after handling a patient, until hands are washed.

Nurses must never put their hands on the beds, unless doing something for the patient.

Do not allow patient to cough or sneeze in your face.

Do not allow patient to touch your face.

Do not eat anything that patient may wish to give you.

If taking a lunch, be sure and use the nurses' dishes.

When leaving wards always wash hands.

Always remember that infectious diseases are taken and carried by contact, and not by air infection.

Rules of Quarantine.—1. When a ward goes into quarantine, only the room or rooms in which the patient has been confined are to be quarantined.

2 Clinics to be allowed in quarantined wards, but not on infectious or suspected cases.

3. Patients may go to operating room from quarantined wards (precautions as below to be taken), except from measles' wards.

Precautions.—(*a*) No further operations in that operating room without disinfection.

Where there are several operations arranged, if any

are from quarantined wards, they shall be the last operations.

(*b*) Disinfecting of everything.

(*c*) No suspected patient to go to the operating room.

Operations may take place from measles' ward or one week after first case breaks out.

Scarlet fever and diphtheria patients to be transferred to isolation hospital.

No patient may go from a quarantined ward to X-ray department.

Length of quarantine of wards in which there has been an infectious disease:

(*a*) Measles, three (3) weeks.

(*b*) Scarlet fever, ten (10) days.

(*c*) Diphtheria, none as a rule; in case of outbreak, ten (10) days.

(*d*) Chicken-pox, two (2) weeks, if any quarantine.

(*e*) Pertussis, three (3) weeks.

(*f*) Mumps, two (2) weeks, if any quarantine.

In addition to writing orders distinctly and definitely, it is well for the head nurse to call attention to any change in dosage. This ought not to be necessary. If every nurse reads her orders carefully, it would not be necessary. But there will always be nurses who need special admonition along this line. For instance, the dose of strychnin might be ordered decreased or increased. If the nurse's attention is not called to the change, she may glance at the word strychnin, overlook the dose, and continue the first order. These things do happen, and the thing to do is to make it as difficult as possible for a nurse to make a mistake, and as easy as possible for her to do the thing required of her. If we want exactness in nursing, we must use every possible means to secure it.

In the matter of records there is still much to be desired

in a great many hospitals. If the bedside records kept by some nurses were to be shown as evidence of the thorough work done by the hospital, they would make a forlorn, discreditable exhibition. Thoroughness in this respect only comes as a result of careful training and supervision. To know how to state clearly, concisely, and colorlessly the exact facts about a patient is no insignificant accomplishment. It means that careful teaching in how to observe and record symptoms and facts has been given and practised, and the teaching can begin with the first day of probation. In this as in other matters it is never a good rule to take anything for granted. A probationer who has been shown how to give a laxative enema has doubtless been led to believe that a good result was obtained with a free evacuation of the bowels. She was told, perhaps, to note on her records "good result." Such a girl might be excused if, after giving a pint of salt solution which was intended to be retained and absorbed, she recorded a "good result" when the patient immediately expelled it. She might be excused, but her instructor should not be excused for not having given clearer teaching regarding it. Thus these practical points might be mentioned by the dozen.

There are Certain Facts that Should be Made a Matter of Record on Every Sheet.—First, the patient's name, thus: "Mrs. Mary Smith," not her husband's name, Mrs. Peter Smith. The physician's name, the date, and the name of the nurse should be filled in the blank space provided, not only on the first sheet, but on every sheet. The amount of sleep should be estimated in hours. Such statements as "slept pretty well" or "had a good night" are too vague and general to be worth anything. If a patient is on fluid diet, the exact amount and the food that has been taken should be noted. In other cases the class

of diet, as semisolid, light, or general diet, will usually be sufficient, unless in case of gastric or intestinal disturbance, when it will be best to state the articles of food given.

One thing that usually requires great emphasis, careful watching, and strict dealing is the time when records are made. Nurses who are otherwise conscientious will often allow hours or half-days to go by without making a single entry. Then they will guess at hours, trust their memories for temperatures, pulses, and respirations of half a dozen patients, put down a haphazard estimate of doses given, and the time, and call that sheet "a clinical record." As a statement of facts, it is not worth the paper on which it is written.

Records that look neat, on which the penmanship is beautiful, the statements made in correct style, are often, in fact, nothing more than records of a nurse's unreliability. A case comes to mind of a graduate nurse on a special case in a hospital. The case was intussusception, about 7 inches of the bowel having been removed. The little fellow was crying piteously from hunger one afternoon when the superintendent went in. The nurse had gone out for a walk. Thinking it might be time to give him some nourishment, the superintendent picked up the record to see when the last had been given. It was then about 5 P.M. Not an entry had been made since the physician had made his morning visit at 9.30. The superintendent took the pains to notice the record the next morning, and everything was set out in beautiful shape. Every hour, even while the nurse had been away, she had given him some treatment, according to her record. This is the kind of thing that superintendents and head nurses have to watch for and fight continuously —not with all nurses, but with a few nurses.

There is only one thing worse than neglecting to make

records at the proper time when the duty is performed, and that is, recording before the thing occurs. This is done, unfortunately, by some nurses, probably in every hospital. Nurses who have given a good report of themselves in other ways have fallen under that subtle form of temptation. They have been found recording as having given, for instance, 8 o'clock treatments at half-past six. On inquiry as to how it came that a record was made of nourishment given to a patient at 8 o'clock when it was still only half-past six, the nurse said she "happened to have a little spare time and she thought she would just fix up her records." She said that, of course, she would do everything she had written down. Her intentions may have been good, though her methods were bad, but can any hospital afford to bother providing paper and pens and ink to record what a nurse intends to do? Why volumes might be written every week about nurses' intentions, but what would they amount to? What the hospital wants, and the physician wants, are *facts* regarding duties actually done, things or conditions actually observed. Nothing else has any value for them as records, and yet this thing will continue to be done by some few nurses in every hospital unless a strict supervision over all nurses and all records is the rule, and unless there is a severe penalty attached to such an offence. To the self-respecting citizen the laws against stealing are no burden. To the self-respecting nurse the laws against such practices will be no burden and they do help to deter weaker characters from giving way to such temptation; they do help in maintaining high standards. All good laws have an educational effect. There is only one word needed to characterize such actions, the little word, *l-i-e*, unqualified. If a record says anything to a physician, it says of a certain thing duly entered at a certain hour, "I have given that treatment," when the

facts were the nurse had recorded her own intentions as facts. The value of any record depends, after all, pretty largely on the conscience of the nurse who makes it. For this reason a poor penman and a poor speller, with good natural ability and a good healthy active conscience, is worth infinitely more in the sick room than the cleverest college graduate who keeps her conscience wrapped up or never uses it except when some one else is around.

A weak point in many records is in the neglect to note important facts. This seems an absurd statement, but it is true. There have been stored away in the archives of some hospitals records of midwifery cases in which the birth of the child was never mentioned. The circumstantial evidence was pretty strong that there had been a baby connected with the case. Here and there on the record it was stated that the "baby nursed," or had its temperature taken, or, perhaps, had a bath, but when that baby arrived on the scene of action, whether it was normal or defective in any way, whether it was a male or female, whether it was white or black, whether it weighed two pounds or ten, its nurse entirely neglected to record. The same kind of thing is true of many operative cases. Nothing is on the records to show that there really was an operation.

In recording the course of surgical cases or midwifery cases it is a good plan to note the days as they pass, counting from the principal event thus—Monday, January 24th—fifth day. It is quickly done, and it saves a doctor's time in counting back, as he usually does, in considering the removal of stitches, dressings, sitting up, etc. The date and the hour of an operation should always be noted on the nurse's records. The operating room records should contain the report of the operation, what was done, what anesthetic, sutures, and ligatures

were used, together with a general statement of the findings at the time, but that does not excuse a nurse from stating on her report of the case at least the time the patient went to the operating room and returned.

Dressings.—Another point that should always be noted is that a wound was dressed. It is much more important many times to note that fact, for instance, than that a temperature in which there was no change from day to day had been taken. Yet the one is done and the other left undone, as routine practice in some hospitals. There is urgent need that some hospitals wake up and take more notice of records and get away from the bondage of habits. A little study of the question, and a little more careful instruction to nurses as to important and non-essential points, would surely be worth while.

General Observations.—Another point that helps in various ways is to require nurses to state on the records when a drug is discontinued. The length of a chill, the character of the breathing, if at all unusual, the appearance of any abnormal discharge from a cavity or eruption on any part, are points that require a little special emphasis with many nurses. For instance, in the case of a colored boy brought into the hospital with frozen feet, the doctor watched the toes carefully, instructing the nurses to observe closely certain symptoms. His medicine was regularly given, the general care was good, but of five nurses and an interne, besides the physician in charge, who had been on duty with that colored boy, not one of them reported a suspicious looking eruption that was on his hands, face, and other parts of the body, until a bright, wide-awake young man nurse was put on the ward, and the first day reported these suspicious findings to the superintendent. It was one of the worst venereal cases that had ever been admitted to the ward,

and yet no precautions had been taken to prevent infection till nearly a week had passed. Nurses are prone to fall into ruts, to get into the habit of mechanically recording what they themselves do, while they often neglect to note important facts which they see or ought to see.

It is well also that the head nurse should not fail to correct a tendency, sometimes manifested, unintentionally, to attempt a diagnosis and record it. For example, a nurse will thoughtlessly state that a patient is suffering from neuralgia or is hysterical, when, as a matter of fact, the ablest physician will sometimes find difficulty in deciding whether he has to deal with hysteria or neuralgia.

The ability to decide between significant and unimportant symptoms comes only with careful instruction, experience, and practice, extended over a long time, but it is safer to teach nurses to lean to the habit of keeping full records, rather than that, for the sake of brevity, they should neglect to note facts that have an important bearing on the case.

FOR DISCUSSION

Mention some methods of improvement in writing orders, which you have observed that save time and are a help to exactness in nursing care.

After the orders have been written suggest ways and means which a head nurse should use to ensure that changes in orders will be promptly carried out.

Describe defects which have come under your observation which lessen the value of a nurse's records.

Outline some blunders in records which head nurse's should assume responsibility for—some in which the responsibility rests with the pupil nurse.

How may the habit of making mechanical routine observations be counteracted and the nurse be led to study the individual patient more closely.

What should be done with nurse who habitually makes untruthful observations on her records.

In order to have neat looking charts and records, it is common in some schools to appoint one nurse to make the records of all treatments and observations made by all the nurses on duty in the department. Is this method desirable or undesirable, from the standpoint of accuracy, punctuality, and efficiency in the general training of a nurse? If not, why not?

CHAPTER XXIII

The Chief Surgical Nurse

The chief surgical nurse occupies a position of responsibility second only to the superintendent. On her keenness, her organizing ability, her conscientiousness in details will depend, to a great extent, not only the reputation of the hospital, not only good results in surgery, but the lives of many of its patients. In addition to the qualifications needed for successful head nursing in general, she needs to be thoroughly abreast of the times in regard to her own branch of nursing.

Organization.—In undertaking her work, a comprehensive system of procedure, thoroughly understood by pupil nurses, will greatly facilitate the daily routine and save much time. "To every man his work" is a necessary rule, care being taken that each detail of an operation has been anticipated and definitely assigned. In most hospitals with an active surgical service the operating corps consists of the chief nurse and two pupils. The following method of organization has been found thoroughly satisfactory. The head nurse has charge of the operating rooms, anesthetic room, aseptic preparation room, emergency room, sterilizers, central supply rooms, etc. She is responsible for the conditions of the instruments, must keep them catalogued, counted, and be ready to account for them at any time; all surgical material used throughout the hospital is prepared under her direction; she superintends and assists in the preparation for the operation, and acts as second assistant;

she is held responsible for the proper labelling of pathologic specimens and must see that they reach the pathologic department in good order.

The senior pupil nurse has for her special duties the preparation of all unsterilized materials; she does the work of the "clean nurse" at operations; she is held responsible for counting the sponges and also replenishing the supplies throughout the house. In preparing for operations she is held responsible for the presence and condition of the operating clothing, the gowns, face-masks, and aprons of the surgeon and all his assistants, also for the brushes and rubber gloves.

The junior pupil nurse does all the duties that fall to the lot of the unsterilized or general nurse. During operations she supplies visitors with gowns, lifts the patient to and from the table, assists the assistant surgeon in preparing the field of operation, empties basins and renews solutions, keeps the floor clear and clean, picks up fallen instruments, is responsible for the operating blankets and arm or leg supporters, changes the patient's gown after operation, and assists the anesthetist as may be necessary. She is responsible for the dusting of the operating room, for cleaning rubber goods, for the tables, pillows, and their coverings. Prior to operations she assists in preparing dressings and the arranging of the anesthetist's table is included in her duties. After operations she removes the blood-stains from clothing and collects it for the laundry.

Reducing Costs.—In the operating room, expensive supplies are constantly in use and the tendency each year seems to be toward increase rather than decrease in the cost of the surgical department. Experience has shown that it is in the power of a head nurse to influence very decidedly the cost along certain lines. For instance, a change of operating room nurses in one hospital

resulted in a decrease of almost one-half in the quantity of ligature material used, while the results were equally satisfactory and the physicians better satisfied. The one nurse had been trained to economize, the other had not.

In the matter of absorbent gauze, great waste is possible, and in many hospitals waste is the rule. A system of washing and resterilizing gauze that has been used in the operating room has been introduced into some hospitals, with the result of a saving that amounts to thousands of dollars in the course of a year. A method commonly employed is as follows: "All gauze and bandages from ward dressings, amphitheater, out patient department, and operating rooms are collected in paper bags and taken to the laundry. It is transferred from these paper bags to openwork bags made of cord, these bags being only half filled. The gauze is kept in these bags throughout the rest of the process of washing and the laundry sterilization. It is put in soak overnight in cold water, which is changed several times. The following morning it is put into an iron washer capable of resisting steam pressure up to ten pounds. It is first washed in cold water until the water runs perfectly clear. The gauze is then washed with warm water, soap, and sal soda. After the washing it is rinsed in hot water. After the rinsing, enough hot water is turned into the washer to cover the bags of gauze as they lie on the bottom of the washer. Steam is then turned on to a pressure of ten pounds. A self-registering thermometer placed in the gauze twice showed a temperature of 239° and 240°. This temperature is maintained for one-half hour. During all this process the washer is moving with a to-and-fro motion which continually agitates the gauze and presents all parts of it to the motion of the water and steam. The gauze is then put into the extractor, and when dry is overhauled and straightened and instructions given to

throw out any piece which is stained or has anything adherent to it. The final sterilization is then done at a temperature of 250°F., with a pressure of fifteen pounds in the sterilizing room. So much for the gauze which is recovered and utilized as gauze. There is a part which is in too small pieces, or is too badly tangled to be worth straightening. This material is run through a rag-picker and becomes a very light and absorbent lint, which is sterilized and used in dressings where absorbent cotton or oakum is ordinarily used. It is also used in the boiler house in the place of waste for wiping around the engines. Another part of the gauze is thrown out because it is stained with chemicals. These pieces are utilized by the house-cleaning force. This process, therefore, means not only less gauze bought, but less absorbent cotton, less oakum, less waste for the engine room."

Rubber Gloves.—The demand of present-day surgeons for rubber gloves has added a very costly item to operating room equipment. That a very considerable saving is possible along this line has been revealed by statistics from different hospitals. The amounts used vary considerably. In one hospital 300 pairs were used for 162 operations; in another, twelve pairs for 252. One hospital reported that a considerable saving was effected by boiling for only two minutes. In other hospitals boiling is not practised at all, the gloves being powdered and steam-sterilized in packages. Care in putting on and removing is the important thing in prolonging the life of a glove. Patching the old gloves with adhesive dam and cement prolongs their usefulness and decreases expense. These should be repaired after each day's operations.

By careful handling of the instruments and accounting for them by frequent inventories a head nurse can effect a very decided saving in the course of a year. Alcohol

is another article which is apt to be lavishly used and wasted. Some head nurses watch this point very carefully, saving all the alcohol left after pouring over hands or instruments for disinfection, and sending it to the wards to be diluted for external rubbing.

In the cutting of dressings and preparing them for ward use there is abundant opportunity for the practice of intelligent economy. A difference of an inch in the size of a sponge makes a difference of many dollars a month in the aggregate, when much dressing material is in use.

The ordinary cotton waste used for cleaning machinery, and that can be purchased for less than half the price of absorbent cotton, can be made thoroughly absorbent by boiling in a soda solution and makes an excellent filling for vulva pads.

The management of the linen for the operating room presents a serious question—one on which a great deal depends on the personal habits of the surgeons. In one hospital it was found necessary to limit the number of sterilized gowns that could be provided for one operation to five. The results were fully as good as when gowns were demanded for every visiting physician or student who happened to be admitted to the operating room. Previous to this ruling, gowns were often demanded by the surgeons as an act of courtesy to their visitors, rather than because they were needed for the sake of asepsis.

In the matter of sheets and towels, the nurse must also, to a great extent, be guided by the surgeons, but not entirely. If she is alert and careful, she can, by a glance, restrain pupil nurses who are thoughtlessly and needlessly opening fresh packages, or check the sending back to the laundry linen that is not soiled and might be resterilized.

These are only a few of the points that need to be

guarded. A head nurse's ability, or the ability of any hospital employee, is not measured simply by her technical knowledge. She must be able to manage her department efficiently and at the same time economically. A head nurse who can reduce the expenditure in an operating room $10 a month as compared with her predecessor, is worth $10 more a month, and her value will undoubtedly be recognized in time.

The cost of the supplies she constantly handles is a point on which the heard nurse should familiarize herself by a study of surgical supply catalogues. No nurse who has the good of the institution at heart, or who has real pride in her management, will long be content, even though wilful extravagance is the rule when she assumes charge, to allow that state of things to continue. An ambition to reduce the amount of supplies, month by month, until the minimum amount possible with good work is reached has resulted in an enormous saving to some hospitals. A nurse graduate who had charge of a small hospital remarked to her superintendent when she returned to visit the hospital in which she had been trained: "I could run the operating room in my little hospital with the waste from the operating room here." What has been done in one hospital can be done in others toward reducing the cost of the surgical department. Here, as everywhere, the first step in good management is keeping account of the items every day.

Much is said and written as to technic. But chief operating room nurses, as a rule, fail less frequently in matters of technic than along other lines in their management of an operating room, though they do fail in technic sometimes. One nurse who appeared to be "diligent in business," proved a failure from lack of methodic planning for an operation. She depended too much on her assistants running hither and thither to

hand things while an operation was in progress. When a catgut ligature was called for, it was on a table in a remote corner and she had to wait for an assistant to get it. If she needed a strip of iodoform gauze, it was in a jar somewhere else. Her hands being sterile, she must have an assistant to help her to get it. The assistant was meanwhile busy emptying basins, getting hot water, etc., and the result was a constant delay and confusion irritating to the surgeon and to all concerned. She lacked in readiness, and her service was unsatisfactory.

Another common failure is that the chief surgical nurse becomes too intimate with the nurses in training in her department. Their relations become so familiar that discipline is out of the question. Laxity in work is pretty sure to result when this occurs. A chief nurse who allows the orderly to loiter around and visit with her nurses while they are preparing dressings; who allows the medical students to become so well acquainted with them that a freedom bordering on familiarity results, or who herself establishes familiar relations with them, thereby demonstrates her unfitness for the position. Womanly dignity is a primary requirement for such work unless the whole tone of the operating room is to be undignified, inferior, and cheap, free, and easy.

The inability to observe all the needs of an operating room while an operation is in progress, or to plan for succeeding operations so that no time is lost, is another common cause of failure. Some of the qualifications for successful generalship are certainly necessary on clinic days, or any day when several operations are to take place in quick succession. It is not alone what she herself does, but how she manages her whole force of assistants so that valuable time is not lost, that determines real success in management in this direction.

A well-known teacher of nurses[1] recommends a good deal more writing out in detail, the things expected of pupil nurses as a cure for much of the confusion that commonly exists when a "green nurse" is being trained. "It seems simple—this matter of organization," she says, yet most of us have had to endure the exasperation of seeing a nurse fumbling under dressings which are not needed until the close of an operation after those for which the surgeon is waiting at the beginning; of finding that the hypodermic has not been filled and the anesthetist is needing it; of discovering that the needles have not been put in at all; of seeing the sterile nurse stand idle for five minutes and then watch her nervously try to thread a needle with material for the closing up while the surgeon says: "Quickly, please," and swears under his breath; of viewing, embarrassed and chagrined, the many other mistakes which this green nurse is bound, sooner or or later, to make.

"We venture the statement that our stupidity and slowness to learn is due largely to lack of system, and that if real system and a little of the old-fashioned learning by rote be used in the operating room the woes of teacher and pupil will be cut in half and the profanity of the surgeons reduced to a minimum.

"Most operating rooms use some system, but many stop short of a *complete system* and compel their nurses to learn by hard and bitter experience.

"It is a perfectly simple thing to have in the operating room a list of the contents and arrangement of each table and shelf, a detailed list of the duties of the nurses during each part of the operation, and a list of things to be seen to at each period of time. It is so simple that we think it not worth bothering with, and we keep our nurses and ourselves on the anxious seat for fear something may have

[1] Miss Minnie Goodnow in The Trained Nurse and Hospital Review.

been forgotten, and worried out of all possibility of good work for fear they will not know what to do.

"Give first to your operating room nurse a list of the contents of her sterile tables, adding, if necessary, a diagram which shall mark the position of each item. If you haven't an established place for every article, establish it, for in no other way can you always be able to hand things quickly. A similar list of the exact contents and arrangement of the unsterile table is made. Another list should be furnished of the items belonging upon the anesthetist's stand.

"These lists should be pinned up or laid in a convenient place while the room is being prepared, and the one containing the sterile items should be where the nurse may run to it for a last look just as the patient is coming in. 'That blessed list' has saved many a nurse from distress and shame."

"Both the sterile and the unsterile nurse should have and commit to memory complete lists of their duties. They are classified as follows: things to be seen to (a) before the operation; (*b*) at the beginning of the operation; (*c*) during the operation; (*d*) at the close of the operation. When each group is arranged, it is surprising how few items there are under each heading. Almost any nurse feels that she can soon learn them.

"*This exact classification* does away with any uncertainty as to who is to do this or that, and lets each nurse know her own work without needing to wonder whether she should help the other. It gives a secure feeling, because she knows just how many items there are, instead of having to worry over some indefinite number which always seems more than it really is. Sterile or unsterile, the nurse may go over her list in her mind and mentally check off each item as she does it. She *knows* whether she has all the things needed, she *knows*

what she must look out for at this stage of the operation, and she works with half the nerve strain and twice the efficiency which she used to have, because of a mind at rest. It is hard to realize, until you have tried it, the mental serenity which these bits of ink and paper give one.

"The lists to be committed to memory might be arranged as follows:

Duties of unsterile nurse:

Before the Operation.—Fill solution basins; fill irrigator and cover it; prepare hypodermic for anesthetist; put alcohol in basin on sterile table; get gowns for visitors; tie doctor's rubber aprons; put scissors and needles in to boil; open dressing and utensil sterilizers; help anesthetist with gown; put doctors' caps and face pieces on them; tie gowns for doctors and sterile nurse; open instrument sterilizer.

At Beginning of Operation.—Help arrange patient on table; adjust blankets; put feet into leg holders, if used; place Kelly pad; protect blankets with small rubber sheets; unpin and take off binder or bandages; remove dressing; place sponges for scrubbing; pour soap, water and bichlorid; pour alcohol or iodine as needed; place instrument tray, if used.

During Operation.—See that instrument sterilizer is boiling gently; see that waste pails are in place; keep clean solution in all basins; have hot salt solution ready and pour it when asked; wipe doctors' faces, if necessary; pick up, wash and reboil any instruments dropped; turn on irrigation when needed; have cautery ready if needed; help in putting table into Trendelenberg position; open and hand jar of drainage tubing if needed; get and boil any additional instrument asked for; watch anesthetist and give hypodermic if asked; open fresh cans of ether; hand emesis basin, sponges or towels if needed; watch sterile nurse to see if she needs you; listen to what the operator says; *stay in the operating room.*

At Close of Operation.—Ring for porter or call orderly; get basin of sterile water for sponging off; help dry patient; hand adhesive; hand binder and safety pins; help put on and pin binder; wrap patient and watch her; untie doctor's gowns; help put patient on stretcher; go down with patient, unless told not to.

Duties of sterile nurse:

Before Operation.—See that tables, basin stand, irrigator, stools, etc., are in position; boil brushes and gloves and put them in their

place; arrange anesthetist's stand; try cautery to see if it works; get operating table ready, warming apparatus, pads blankets, etc.; get Kelly pad ready and in place; put instruments, except scissors and needles, to boil; put knives into carbolic (or alcohol); put on rubber apron and cap; scrub up; put on gown; get out basins, pitchers, etc.; cover tables; get dressings from sterilizer and arrange them; put on gloves; get instruments, arrange and cover them; get out sutures, threading part of the needles.

At Beginning of Operation.—Place sterile towels for the scrubbing up; place sterile sheets; place sterile towels, etc., about field of operation; if instrument tray is used, cover with towel; place sponges, large and small; uncover instruments and hand ones first needed (knife, artery clamps, tissue forceps, scissors, etc.).

During Operation.—Keep surgeon supplied with sponges; keep at least two artery clamps near assistant; keep tissue forceps, knife and scissors clean and near surgeon; hand other instruments as needed; lay back on table instruments which are no longer needed; keep instruments washed; keep clean towels about field of operation; have ligatures unwound, cut and ready; have sutures threaded and placed in needle holder; *listen to the surgeon;* watch your technic; watch operation if you can.

At Close of Operation.—Cover or put away sutures; hand sponges for cleaning up and help if necessary; hand dressings; take off gloves and help bandage; pin binder and help wrap patient; if another operation is to follow immediately, wash instruments and put to boil

These lists will need additions and alterations according to plan of work and amount of help. Several items will need to be added if operations follow each other closely. The main thing is to be sure that no item, however small, is omitted. If you choose to arrange them in the exact order in which things are to be done, it may be of advantage.

"The following schedule will serve as an outline which may be filled in to suit individual requirements:

Contents of anesthetist's stand:

Top.—Two inhalers, chloroform, 1 bottle; ether, 3 or 4 cans (¼ lb.); alcohol, cold cream or vaseline, tongue forceps, mouth gag, old knife for opening ether cans, scissors, large pieces of gauze for covering eyes,

hypodermic tray, amyl nitrate pearls, filled hypodermic, small sterile sponges for hypodermic.

Shelf.—Emesis basin, small pieces of gauze for wiping mouth, six small towels.

Contents of unsterile nurse's table:

Top, Right.—Two-quart pitcher of warm sterile water, one-quart pitcher of 1–1000 bichlorid sol., bottle of green soap, bottle of alcohol, bottle of tr. iodine, package of sponges for scrubbing up, basin containing sterile brush for scrubbing.

Top, Left.—Three sterile gowns, each in separate package; packages containing caps and face pieces.

Shelf.—Three towels, emesis basin, jar of drainage tubing, specimen dish, adhesive plaster, safety pins, abdominal or T-binder, roller bandages.

Contents of sterile nurse's table:

Large Table, Top.—Instruments, arranged in order, each kind having its special place. Those most used are in front, the odd pieces at the back. Basins containing water and sponges for washing instruments.

Shelf.—Tray containing knives, basin of hand solution for nurse, final dressings.

Small Table, Right.—Catgut in covered dish, silk-worm gut wrapped; any other sutures used, needles in dish, small dish of alcohol, needle holder, space for threaded needles.

Left.—Sponges, large and small; towels, abdominal rolls or packing, any special dressings.

Shelf.—Sheets, extra sponges and towels.

The technic to be observed in the operating room of a well-known Canadian Hospital[1] illustrates a somewhat different method of teaching the details.

Dress of Surgeons.—The operating surgeon and all assistants, including the anesthetist, should be clothed in sterilized gowns, with sleeves long enough to be overlapped by the gloves. He should wear a cap, and a mask to cover the mouth. Each surgeon may, and

[1] Hospital for Sick Children, Toronto.

assistants shall, wear rubber gloves, and care should be taken that these gloves are free from holes. Extra gloves should always be kept in readiness.

Dress of On-lookers.—All on-lookers on the floor of the operating room in important operations should be clothed in gowns, caps and masks. No such on-lookers are, however, to be admitted except by consent of the operating surgeon, and in any case clothes must be covered by slip-over gown, not necessarily sterile, but put through sterilizer after once worn.

Dress of Nurses.—This should be similar to that of the operating surgeon and assistants. The gowns, caps and gloves of all surgeons and nurses should be put on by a sterilized nurse detailed for the work. This nurse should take pains to avoid touching any part of the clothing of those whom she is dressing, or any part of gloves except the margin of the opening, and in case of such accident she should frequently rinse her own hands in bichlorid solution 1–2000. She should not assist in this work after putting on her gloves preparatory to handling the sponges.

Sterilization.—All linen, gowns, caps, towels and dressings should be sterilized by steam at a pressure of fifteen pounds, for at least half an hour.

In the case of *Prepared Dressings*, such as iodoform gauze, double cyanide gauze, or other manufactured gauzes, such should be wrapped in paraffin paper, and should be handled by sterilized hands and instruments, such as forceps, for removing the gauze.

Silk-worm gut, horse-hair and tubes of sterilized catgut, should be kept completely covered in a carbolic solution 1–20. This solution should be changed once a week, and removed therefrom before the operation to sterilized water or an antiseptic solution, or on to a table covered with a wet or dry sterile towel.

Silk or celluloid sutures or ligatures should be sterilized at fifteen pounds pressure half an hour on first preparation, boiled from three to five minutes, and afterward stored in ac. carbolic 1–20, or in alcohol.

The tubes containing catgut should be boiled with the instruments.

Rubber tubing for drainage purposes should be washed with green soap and water, where possible, inside as well as outside; then rinsed in water; and afterward scrubbed with ether; then boiled for half an hour; and kept covered with bichlorid 1–2000 in a glass jar. This should be changed once a week.

Rubber tissue or oiled silk, cut into pieces 9 inches square, should be scrubbed with green soap and water (not over 100°F.), then soaked in ac. carbolic 1–20 for twelve hours, then rolled loosely; and placed in a jar or sterilized salt solution.

The nozzles, etc., for irrigating purposes, should be kept in carbolic acid 1–20; after operation should be disconnected, washed and returned to antiseptic solution.

Jars, funnels, basins and all receptacles should be thoroughly scrubbed with green soap solution or sapolio, then rinsed with water and boiled in carbonate of soda solution.

The basins to be used in the operation should be placed in position by a nurse whose hands have been sterilized.

Glassware should be washed in Pearline suds, dried and polished with alcohol. Stains can be removed with ac. hydrochloric.

Instruments.—All scissors, scalpels and needles should be wiped with alcohol, then boiled for three minutes. All other instruments should be boiled in carbonate of soda solution immediately before the operation. To prevent discoloration of steel, the instrument should not be immersed until the water is boiling.

Instruments in Emergency.—Should any instrument, not previously prepared, be called for during the progress of an operation, it should be immersed in boiling water for three minutes, then seized in a pair of sterile forceps and dipped in cold water (sterilized) before being handed to the surgeon.

List of Instruments.—A record of the number of forceps, scissors and needles used in each abdominal or thoracic operation should be kept, and the number accounted for before the wound is closed, the nurse in charge of the instruments being held responsible.

Care of Instruments after Operation.—(*a*) After clean cases, all instruments, including scalpels, scissors and needles, should be washed and scrubbed with a brush in warm (not hot) soap suds with Sapolio, then transferred to very hot Pearline suds for a few minutes. This water should be then poured off and the instruments very carefully dried while still hot, and polished with chamois.

(*b*) After septic cases, all instruments, including scalpels, scissors and needles, should be scrubbed and washed as above, then boiled for five minutes, and afterward dried as above.

Gloves—Wet Preparation.—(*a*) Before operation, gloves should be wrapped in a towel and boiled for five minutes, totally submerged (care being taken to see that the gloves contain water). The gloves must remain in the sterilizer until required, and then transferred to sterilized water, one pair at a time.

(*b*) As soon after operation as possible, gloves should be thoroughly washed in green soap and water, then turned inside out and thoroughly washed again. While in the solution each glove should be carefully examined for holes and rents and, if any be found, such gloves should be set aside for repairs. If they have been used for

septic cases, they must be boiled after being scrubbed. They should then be dried and powdered.

Dry Preparation.—After being boiled for five minutes gloves should be thoroughly dried (both sides), well powdered, placed between folds of gauze and raw cotton, wrapped in a towel, and put in the sterilizer for fifteen minutes.

Repair of Gloves.—The part around the hole should be wiped with gasoline and benzine, slightly roughened with fine sandpaper or emery-cloth, then smeared with rubber cement, which should be allowed to become almost dry. The patch to be applied should be prepared in the same way, and when the two surfaces are nearly dry, they should be firmly pressed together. The patches should be placed upon the inside of the glove. It should be recognized that the damaged glove is a menace, because not only may septic matter be pumped into the surgeon's fingers, but macerated epithelium and germs may be pumped out from the skin of the surgeon to the wound of the patient through a very small opening. Gloves patched too frequently are dangerous.

Extra Gloves.—There should be on hand, prepared, two or three pairs of extra gloves in case the operating surgeon or assistants should deem it advisable to change during the operation.

Cleansing of hands.—The hands of all surgeons and nurses, and the forearms, including the elbows, should be thoroughly scrubbed with soap and water, using a gauze brush under running water, for at least five minutes, then washed in alcohol (sixty-five per cent.), and afterward soaked in 1–40 carbolic, or 1–2000 bichlorid solution for two minutes. After disinfection the hands should never be dried on a towel, but should be allowed to dry in the air.

Pieces of gauze for this purpose should be kept in glass retainers in the wash room.

Gauze Sponges, Wires, Pads and Strips.—These should be of various sizes adapted to the needs of various operations. They should be made of gauze of good quality, so prepared that there are no loose edges upon the surface. They should be sterilized by steam under pressure, as described, and should be used dry or out of sterilized water or antiseptic solution.

In quite clean cases, they may be rinsed out of sterilized water and used over and over again during the operation, but in septic cases, or when contaminated with pus, fæces, urine, mucus, etc., they should be discarded after being used once.

In abdominal operations, all gauze sponges and strips should be provided with tapes and should be carefully counted before operation, and accounted for before operation is finished.

Sea Sponges.—Sea sponges after preparation, should be kept in 1–20 carbolic acid. When required for use they should be removed from this solution to sterilized water or antiseptic solution. Sea sponges should be on hand in every operation about the mouth or throat, and in other operations when preferred by the operating surgeon. In harelip operations, two sets of sponges must always be ready, one for the lip, the other for the throat, and they must be handled by two nurses.

The need of a system of standardized technic which all nurses would be expected to know is illustrated by the different answers given in an examination paper in reply to the questions:

[1]*What are rubber gloves used for? How are they prepared? What points should a nurse notice before, during and after operation?*

[1] Quoted from Una—an Australian Journal.

"Hardly two answers were exactly alike. Of course, the greatest number boiled the gloves, but at various times and in various solutions. A few sterilized them by steam or by the dry method, as they called it. Many both boiled and afterward dry sterilized them. Frequently they were dried and powdered after boiling, and two blew or puffed out the fingers after sterilization. Undoubtedly some had never seen a rubber glove, let alone sterilized them.

Some of the methods have been tabulated and some answers are given verbatim. Various answers for each method: Dip in boiling water; dip in boiling water for two minutes; boil; boil at 250 deg. F.; boil for three minutes and no longer, as it injures gloves; boil for not more than four minutes in a soda; boil for seven minutes; boil for ten minutes; boil for fifteen minutes; boil for twenty minutes; boil for thirty minutes; boil for one hour; boil for various times, and then put into 1–20 carbolic, 1–500 to 1–1000 hydrarg. perchlor. or hydrarg. biniodide, 5 per cent. lysol, boracic lotion, 1 dr. to pint methylated spirits; boil in saline; boil in normal saline 4 drs. to 8 oz.; boil in soda; boil in soda 1 per cent.; boil in soda for twenty minutes, 1 dr. to pint; boil in strong soda, 2 oz. to pint. Several others said soda on no account should be used, as it injures rubber gloves; boil various times, and then dry sterilize for twenty minutes to one hour; boil in carbolic, hydrarg. perchlor., or boracic lotion; no boiling, as it injures gloves, these sterilize by soaking in 1–20 carbolic acid or hydrarg. perchlor. A few nurses: Dry sterilize; dry sterilize for twenty minutes; dry sterilize for forty minutes; dry sterilize for one hour under pressure at 212 deg.; dry sterilize under pressure at 240 deg. after boiling. Another school of nurses: Wash in soap, blue soap, green soap, ether soap, some with scrubbing, some without, while several scrub with

nail-brush. One answer under this heading is worth reproducing in full. It runs: Scrub both sides with nail-brush and blue soap for five minutes, then leave in hydrarg. perchlor. solution for half an hour. After preparation see that the gloves are intact. Another scrubs for five minutes with nail-brush and sterile water, using ether soap, scrubbing both inside and out. After scrubbing, she drops them into hydrarg. perchlor. solution, and leaves them for the surgeon to pick out himself. One can conjecture what he would say. One candidate, after preparation by scrubbing, went on: "If much pain or redness is caused in preparation, etc." The examiner for more than one reason did not read further. What was the nurse who wrote the following thinking about? "They should be boiled for twenty minutes and served in sterile water."

Another nurse boiled them for half an hour, changing the water frequently. Another would "boil in saline for twenty minutes and place in a bowl for use." Two only said that surgeons should remove them under water so as not to tear them.

A few others said if hands were wet before removing they were not so liable to tear the gloves. A good many nurses sent the gloves with holes to be repaired, but one went better and gummed patches on herself before boiling. We could do with a lot of these nurses at any hospital, if it was only to give advice to students. But what about the advice given in this answer: "It is better to destroy them after an operation with pus."

One nurse evidently got muddled as she gave the following remarkable suggestion: "Points to be noticed are that they are sound, and that one of them has not slipped off the surgeon's hands and been buried in the cavity opened up by the operator." Watching sponges confuses many nurses, but if gloves are added, here

will be more confusion, and they are sometimes removed as quick as lightning, so they might easily be missed. Quite a number of nurses, after carefully drying the gloves, stored them in boracic powder. It is cheap, but French chalk is cheaper and better. A careful nurse, and one with much consideration for her patients, but whose idea of gloves must be confined to those sold by drapers, answers thus: "Wash well with warm water and soap; rinse in several waters and place in carbolic 1–20 or biniodide." She goes on to add: "If they have buttons or claps, care must be taken that they do not catch in anything or injure the patient during the operation."

One of the best answers given was the following:

"India-rubber gloves are used to prevent infection of patients by the hands of surgeons and their assistants during operations, and in turn to protect their hands in septic or syphilitic cases. They are used for rectal and sometimes vaginal examinations. They can be sterilized either by boiling for ten minutes or by steam pressure in sterilizer. Care should be taken to size them properly, and to wrap in gauze before preparation. Before and after use, examine for holes and punctures. If torn during operation, they should be changed at once."

Uses for Worn-out Rubber Gloves.—An interesting illustration of the varied uses to which the rubber in worn-out gloves may be put was shown at one of the hospital conventions.[1] The items included the following:

A pad for protecting the eyes during anesthesia, made of cotton and covered with rubber, cut from the back of the glove, the cotton and rubber being sewed together.

A cover for a saline flask, made of a piece cut from

[1] Prepared by Miss Gretchen Nuessel, surgery supervisor of the oungstown Hospital, Youngstown, Ohio.

the inside of glove and held over the gauze, used as a stopper, by a rubber band made by cutting the finger of the glove the proper width for the purpose.

A protector for wide-mouth bottles covered with sterile gauze and containing dusting powder.

A protector for test tubes used for the same purpose as bottle above described.

Finger cots of various sizes made by amputation of the fingers of the gloves.

Rubber bands of different sizes and widths cut from fingers and wrists.

Strips of various sizes to be used instead of gutta percha or rubber dam for subcutaneous drains.

An "intramuscular drain" made by a continuous piece from back of glove through finger, and down the front, with the sides cut from fingers, but the end left in. This makes a double drain capable of easy introduction with a probe, and easily removable.

A protector for "gall bladder drain," made as follows: A piece of rubber tubing is wrapped with gauze to suitable thickness and gauze is then covered with rubber cut from the whole glove, with wrist band and fingers removed, the whole being sewed together. Expensive rubber dam was formerly used for this purpose. The advantage of the rubber covering is that it prevents excoriation of the tissues by the drainage and renders the removal of the drain much less painful.

Patches for the mending of gloves and bath caps.

One of the uses for rubber bands displayed was the wrapping of wood applicators in a very small piece of muslin, with the ends folded over and secured with rubber band cut from finger of glove.

How much should a pupil nurse know when she leaves the operating room? A good deal of complaint has been made in regard to the neglect of the chief operating room

nurse to teach—but comparatively few training schools have worked out in detail, a list of the things she is expected to teach. Such a list would surely be a long step toward getting the teaching done which should be done. Different principals will evolve somewhat different lists and the details in regard to technic which have been given in previous pages have indicated the general items which should be covered, but if a definite outline is made of the details expected to be taught and learned while in the operating room, and every pupil is given a list and expected to check up her own records to see whether she had covered the ground intended—as is now generally done in regard to bedside nursing—see page 62,a considerable advance toward remedying the neglect complained of would be fairly certain to result.

The following items are given simply by way of suggestion of what such a list should contain—not with an idea of being comprehensive.

The list might be itemized under different headings to facilitate the checking up:

General Instructions.—1. The mechanism of autoclaves; drums, basins, water and instrument sterilizers. Management of foot treads for water supply, soap holders; waste pipes, etc., use and management of tanks, irrigators, etc.

2. To test instruments for sharpness, to sharpen common instruments such as razors and scalpels. Tests for spring or catch in certain forceps. To put away instruments of all kinds properly; to boil cutting edged instruments for a definite time or not at all.

3. To manage the cautery; hold all kinds of specula and retractors; put on a torniquet; to measure oxygen in a tank; preparation of special appliances—Murphy button, bougies, sounds, cystoscope, laryngoscope, etc., infusion sets; hypodermoclysis outfits.

4. To prepare slides or test tubes for smears or cultures; names of needles, and special care to be used in classifying and preparing them.

5. The arithmetic of all solutions; special methods of preparing solutions for eye work; method of applying collodion, etc.

6. Preparation of skin for operation; how to shave quickly and well; uses of iodine, benzine, etc., in skin sterilization.

7. Sterilization of—glass goods used in operations; liquid paraffin; wax, vaseline, olive oil, etc. Gauze dressings, cotton, packing, etc. gloves, rubber dam, jars; ligature and suture material at different periods and by different methods; packing of autoclaves and making of all sorts of dressings.

8. Preparation for tapping any cavity; preparing drains,—cigarette, tubes, gauze, etc., assistance at lumbar puncture.

9. To put patients quickly in the different positions needed during operation—Trendelenburg, Sims, Dorsal, etc., care of patient in shock; application of restraint when needed.

10. Preparation for administration of blood serum, salvarsan, etc.

11. Care to be used in regard to specimens—preparation of specimens of blood pus, sections, etc., record regarding urine.

12. Management of sponges—counting and recording. Keeping of operating room record as to anesthetic, stimulation, drainage, etc.—to be sent to wards.

13. In regard to anesthesia the pupil at the end of her O. R. service should know—precautions to be observed in preparation for anesthetic—how to make ether cones; inhaler covers, etc., eye pads; methods of mouth cleansing; method of "setting up" the anesthetic room for

different anesthetics; care of anesthetist's tray; how to hold jaw; how to sponge out mucus; management of tongue clamp; mouth gag.

14. Uses of ethyl chloride; cocaine, gas, oxygen; ether, chloroform; stovaine, etc. Deterioration of chloroform when exposed to air; evaporation, waste, and deterioration of ether—reason for quarter-pound cans, etc. Administration of amyl nitrite, oxygen; artificial respiration.

15. Management of stretcher for patient when leaving operating room; care of patient in returning from operation; observation of bed to which he is taken; special care in tonsil cases; observation, and care while recovering from anesthetic.

16. Assisting at the wound—may or may not be included in the list of what nurses should be taught. Certainly a great many nurses have to render such assistance. Such assistance will include:

Proper arrangements and method of handing instruments; threading of needles; management of all suture and ligature material; handing of gauze packing; packing required in different conditions; management of artery forceps; handing sponges, towels; preparation and handing of applicators; methods of sponging wound; uses and handling of different retractors; assistance during suturing; irrigation; removing sutures.

Attempts to simplify surgical technic where a great many different doctors are operating have been made with considerable success. The method agreed on by the medical staff of Grace Hospital, Detroit is given here by way of suggestion. The methods which follow were carefully tested out then presented in printed form to surgeons, not on the staff, who were operating in the hospital.

This standardization of technic has proceeded along the following lines:

1. The adoption of a brief outline of "house orders" for the preparation of patients for operation.

2. The adoption of a uniform method of care following operation.

3. Adoption of uniform operating room methods in the preparation and sterilization of cotton, gauze, ligatures, and general supplies.

4. The adoption of a uniform surgical technic by surgeons in all general surgery.

In putting the plan into operation the following general plans and suggestions to other operators were agreed on by the staff:

5. That all surgical patients save emergency cases, be sent to the hospital as early on the day preceding operation as possible.

6. That in abdominal operations all operators dispense with gauze sponges for use in abdomen and use only the large gauze towels. Loss of sponges in the abdominal cavity will be obviated by the use of towels, and the operator will soon become accustomed to their use.

7. That small sponges never be used in the abdomen except on a sponge holder.

8. That gauze drainage be dispensed with.

9. That cigarette drains or rubber tubes, enclosing wicking be used.

10. That irrigators and basins containing solutions be dispensed with in the operating room.

11. That gloves be worn dry.

12. That the only solution used in the operating rooms shall be dilute alcohol.

13. That twenty minutes be allowed to prepare room for next operation.

14. That the preparation of the skin for any operation be carried out by sponging with 3 per cent. solution of iodine.

15. That operators shall report in operating room fifteen minutes prior to operation and be prepared to operate on schedule time.

16. That irrigation in vaginal cases be discontinued.

17. That in operations on cervix and perineum the vagina be sponged only with 2 per cent. solution of iodine.

18. That operators lock their instrument cases and lay out instruments only with the help of the instrument nurse.

19. That operators furnish their own rubber gloves, except for use in staff operations.

20. That the operating room supervisor be notified the day previous of special material or supplies needed for operations.

21. That physicians do not talk or congregate in rotunda or visit in the operating room corridor.

22. That physicians be on time for use of dressing room.

23. That lay visitors and relatives of patients be not admitted to operating room floor or operating rooms except in emergencies.

24. That the keynote of technic be simplicity.

25. That whims and fads be abandoned.

26. That operating room technic be standardized.

Standard Scrub for Hands and Arms.—Scrub with soap and water two minutes, trim nails to 1 m. and then scrub with soap and water five minutes; finish with dilute alcohol. Dry hands and use gloves dry with sterile powder.

The standard rules have not yet extended to the genito-urinary or to the eye, ear, nose and throat de-

partment, but several months of experiment have shown that standardization in surgical technic is possible and that it has so demonstrated its value in the saving of time, strength and supplies, that it will be extended to other departments.

FOR DISCUSSION

Is it desirable to arrange for every nurse to have operating room training? If not, give some reasons and discuss ways of giving other experience which will prove of equal or more value to such nurses as do not have a term in the operating room.

When may a nurse be said to be a failure in operating room work—when a success?

Outline ways and means by which the chief surgical nurse may teach conservation of supplies.

Ethical failures of chief surgical nurses are frequently mentioned when inquiries are made as to fitness for such a position in some other institution. Discuss in detail some ethical failures you have observed and show how nurses may guard against them.

What responsibilities regarding the discipline of the school is a chief surgical nurse reasonably expected to observe?

Chief surgical nurses must be recruited from the ranks issuing from the schools each year. Discuss the qualifications desirable for such a position and give some reasons why one nurse seems to give promise of developing into a good operating room executive while another does not.

If recommending to a nurse who seems to have operating room executive ability the desirability of further preparing herself for such a position what advantages has this branch of nursing to which attention might be called?

Mention in detail some general courtesies and important rules relating to ward head nurses which the chief surgical nurse should be careful to observe.

Discuss the case records made in the operating room in their relation to the general management of the case. Outline the points in case records which should be made regarding every case.

CHAPTER XXIV

The Night Supervisor

The chief night nurse occupies a position of peculiar responsibility. She sees very little of the physicians, rarely receives orders from them, yet is held responsible for the execution of those orders. It is hers to discern the importance or significance of certain symptoms, her business to decide as to the wisdom of calling up the interne, or, it may be, the physician in charge of the case, or, in some circumstances, to summon the patient's friends in the event of serious change. It falls to her lot to meet emergencies of all kinds, to usher in the accident case or the maternity patient, and make hasty preparations, to meet, resourcefully and promptly, the thousand and one situations that arise at night in a hospital devoted to the care of patients suffering from acute diseases and accidents. She, as a rule, writes no orders for her night staff, yet must see that the orders written are properly and punctually carried out.

Relation of Day and Night Nurses.—Her work is, to a large extent, dependent on the day head nurses. They can do much to remove difficulties for her or to create them. While it is readily admitted that for the good of all concerned the most cordial relations should exist between the day and night supervisors, as a matter of fact, the attitude assumed by both is very often unnecessarily critical and harsh. A little wholesome criticism is good for both parties. If the day nurses went off duty leaving utensils not cleaned up, the head nurse in charge of the delinquents ought to thank the

night supervisor for calling attention to the neglect. It is the only way to maintain standards of cleanliness and order. But, is she thankful? Sometimes, perhaps, but often she resents it, and the same is true on the other side.

The Need of Harmony.—While in regard to rank the day and night supervisors are equal, yet in the matter of housekeeping and general ward management more responsibility rests on the head nurse in charge during the day. She, as a rule, ushers in the new patients and receives orders and explanations. It is not only a kindness, but a duty, to give to the night supervisor as full a report as possible, especially concerning those patients who are most seriously ill. What instructions have been left in case alarming symptoms develop? Is a certain patient who has been a special cause of anxiety better or worse? Has any special change occurred since the doctor saw him in the morning? Has the doctor left any special instructions about calling him? These are questions where individual judgment comes largely into play—questions in which the utmost harmony between the day and night staff is necessary. There are some head nurses who seem to go about with a chip on their shoulder, ready to argue over the slightest matter, and especially to pick a quarrel with the head nurse who alternates with them. Such nurses are out of place anywhere in an institution, and particularly as head of a department.

The night supervisor should be slow to criticize the day head nurse regarding management, and should upset her arrangements as little as possible. When she finds it necessary to do so, common courtesy would suggest that she use the first opportunity of making explanations.

Organizing the Work.—The comparative freedom from interruption from outside sources makes it possible for a

night supervisor to do much to help her staff in systematizing their duties so as to economize time. There are good nurses who are habitually slow; faithful nurses who are always behind; nurses who run from one thing to another, leaving the first unfinished, and soon find themselves hopelessly in a muddle. When the clock strikes for the day nurses to relieve them, there are still numerous duties unfinished. In such cases the night supervisor has a splendid opportunity to show the nurses how to get through, to plan a routine of their duties, and, by keeping them to it as far as possible, by making them finish up as they go along, lead them into better habits.

Evening Visits.—There is one difficulty in planning the night work of a hospital which needs constantly to be guarded against, and in some cases legislated against. This arises from the bad habit some doctors have of making evening visits and leaving a list of new orders for the night nurses, which necessitates an additional burden of work that should have been attended to by the day staff. Very frequently one night nurse must take charge of patients that are divided among three or four nurses during the day. If the work is properly planned—dressings, baths, and daily treatments attended to during the day—this can, as a rule, be managed without serious difficulty. But if an interne or a visiting physician is allowed to come in at 9 P.M. and order enemata for two or three patients that should have been ordered in the morning; if another doctor can come in and order a bladder irrigation for his patient; another, massage for his—the best system in the world will fail. The most capable nurses will find it absolutely impossible to give general attention to all the patients, answer bells promptly, and at the same time carry out these special orders for the few. There are some physicians so thoughtless, so absolutely devoid of system in their

own work, and so utterly indifferent to the rights of hospital workers that they need very strict dealing with on the part of the superintendent if confusion of orders and burdens grievous to be borne are not common experiences of the night staff.

Routine Duties.—To the slow nurse who is always behind there usually seems to be but one remedy—to begin the regular morning work earlier. It is not uncommon to find night nurses waking up the patients at 2 o'clock to have their morning toilets attended to and their temperatures taken. It is true, the night staff is often overburdened, especially in the evening and early morning hours, but careful systematizing of the work will help wonderfully in getting through, and in times of extra pressure extra nurses should be provided for the busy morning hours. It should be no unimportant part of the night supervisor's duties to plan the routine of work, and also to see that the patients are not aroused from their slumbers at such unseasonable hours as they often are, when the matter is left entirely to the pupil nurse's judgment.

In the matter of punctuality, the night supervisor can teach by example as well as by precept. Especially is this needed in regard to coming to meals. If the hospital rules require night nurses to be in the dining-room at a given time, it is the supervisor's duty to see that they are there. If the rules say that night nurses must be in bed at a certain hour, and must remain there a given time, she has no right to ignore irregularities and allow nurses to violate rules without reporting them.

In forming habits of study, the night supervisor can do much be encouraging her night staff to set apart some regular time each day to real systematic study. It is a common complaint of nurses that they cannot study because they are on night duty. That notion needs to be

combated, for it is true that nurses who are really ambitious to study have found their term of night duty no drawback, but rather favorable. *Much time is wasted by probationers and nurses in aimless gossiping.* Clad in kimonos, they congregate in each other's rooms and spend hours rehearsing the day's events, in discussing their patients or the doctors, what they get to eat or what they think they should get, what Mrs. Fisher said or Miss Green did, while at the same time they groan and continue to groan and complain that they have no time for study. Not only are they wasting time and energy in giggling and unprofitable conversation, but they are forming habits of gossiping about people that will be a detriment to them through life. The nurse's life in a hospital is circumscribed and narrow and depressing, which is all the more reason why head nurses should not only put forth extra efforts to discourage personal gossip, but to awaken a desire for higher things.

Discipline.—It may seem needless to state that the same strict rules of discipline should prevail on night duty as on day duty; but it is a fact that disciplinary regulations in some hospitals are greatly relaxed at night. Sometimes a degree of freedom, where internes are concerned, is permitted that, on day duty, would not be tolerated. Sometimes nurses are allowed to visit in patients' rooms promiscuously, and to visit each other in wards at night when the rules emphatically forbid. These are points on which the blame rests more on the head nurse than on any other person. It is not only her business to obey the rules of the institution which pertain to her, but to see that the nurses of whom she is in charge do not violate those that pertain especially to them.

That little motto, mentioned before, "study to be quiet," is one which the night supervisor needs to keep constantly before her staff. Many a nurse with good

judgment in other things, good ability, good conscience, and good health, has made a poor record as a night nurse because she was noisy. Doors banged, bed-pans rattled, her feet came down with a thud, she talked in a loud tone, everything she touched seemed to make a noise, and every one in her department was unnecessarily disturbed. The most highly strung patient's nerves were continually on a tension—all because the nurse had not learned to be quiet. The art of doing one's work quietly comes easier to some than to others, but it can be, and should be, studied by all. No one is in better position to teach this art than is the head nurse.

The Nurse with a Grievance.—The night supervisor will often be sought as a confidential adviser by some pupil nurse who feels she has a grievance against her day head nurse. She sees what she thinks is favoritism shown, or she has been reprimanded, or misunderstood, or in some way an injustice has been done her. Perhaps, while smarting under a rebuke, she pours out her troubles to the night supervisor. It is a delicate situation, one requiring infinite tact, and often she scarce knows what to answer. There is one thing that should always be kept in view in dealing with such situations. If real harmony is to prevail in the institution, a sense of loyalty to each other must be shown by head nurses. No one should be led into doing or saying a thing that might weaken another head nurse's authority, or detract from the respect due the position. Regardless of personal feelings in the matter, even though one side of the story seems to point toward injustice, a discreet silence or a non-committal attitude is the best course for all concerned. At the same time, a sympathetic hearing and wholesome counsel can always be given to the nurse whose feelings have been wounded.

The nurse who craves popularity, who prizes it above

the consciousness of duty faithfully performed, should never be given head-nursing responsibilities. No one whose business it is to correct and supervise, to enforce rules and point out faults, can expect to be popular in the ordinary acceptance of the term. Human nature is so constituted that it does not keenly relish having failures and defects in work and character or conduct brought under condemnation, even though it is conscious of them. Having favorites among nurses, the establishing of a gossipy attitude, confidential personal relations with subordinates, are serious faults in a head nurse. The head nurse who aims to be popular with her probationers and staff nurses is reasonably certain to fail in her duty to the patients and to the institution.

Frequent conferences with the superintendent will do much to keep the night head nurse in touch with institutional affairs in general. A preliminary talk on the part of the superintendent to each new force of night nurses will help toward securing good work and the maintenance of proper discipline. Of necessity, the life on night duty is somewhat isolated. The nurses come in contact with comparatively few people except the sick, and a depression, partly physical, partly mental, seems inevitable because of the turning of day into sleeping time and night into working time. Naturally, the head nurse shares to a degree this depression, but the experience is one that affords splendid opportunity of developing resourcefulness and many other qualities that can never be called into play without the responsibility for their use that is necessitated by night duty.

The need of outside interests to combat this depression requires special emphasis. At best hospital life is narrowing and absorbing. Animosities develop quickly and are stimulated by monotomy, depression and the close contact with people of varying temperaments.

"Hospital grouch" is a well-defined disorder, easily recognizable and contagious to a degree. Nothing does more to prevent or cure it than a variety of interests outside of the hospital and apart entirely from the world of sickness.

The making of the night supervisor's report on the condition of patients is one of the important duties which links her with the world outside in ways she often fails to consider. The friends of the patient will ordinarily wish to know the patient's condition in the morning if the case is at all serious. The report going out from the office must be based to a large degree on the report made. The family have a right to know the real details more intimately than it is as a rule wise to give them to casual acquaintances. Too often such reports are perfunctory and tell nothing. A patient who had been in the hospital for some weeks died rather unexpectedly. Some friends asked the husband what his wife had died of, "I think she died of 'improvement'" he said. "That was all they would tell me—'she is improving' and first thing I knew she was dead." In larger hospitals quite often a blank form is provided in which are classified in three or four different classes the patient's and their general condition. In a certain column those who are convalescent are listed. In another those whose condition is good but who are not yet convalescent. In another those whose condition is considered critical or serious. This blank is sent to the operator of the telephone who answers calls and enables her quickly to locate a patient's report when a call comes.

To an inquirer about a patient the answer that she is "a little better" tells nothing of any special value, if the inquirer did not know the condition that existed previously. "Condition satisfactory" expresses the idea intended to be conveyed, much more accurately.

"Condition unsatisfactory" is a necessary report sometimes but needs to be used with a good deal of caution. To convey the idea that all is not as well as we wish it were in regard to a patient's condition without raising undue alarm needs careful wording many times.

What should the night supervisor be expected to teach? That depends a good deal on the principal and the general arrangements. She can help a good deal by conducting quiz classes with her night nurses. She should know the ethical principles which should be observed by night nurses in particular, and should consistently uphold proper ethical standards The night nurses are subject to temptations of a somewhat different type than those which confront the day nurses and the standard of conduct and principles which the night supervisor has will affect largely the nurses under her direction. She has abundant opportunity for teaching hygiene in a very practical way, no matter how large or how small the hospital may be.

Do's and Dont's.—Do enforce rules on night duty as carefully as you would expect them to be enforced on day duty.

Do not allow a special nurse to appear in halls where she will encounter internes, orderlies or doctors, half clad or in a kimono which is too scanty to be decent in a public place.

Do try to avoid friction between day and night nurses and remember that very often such friction affects working efficiency and the patients suffer because of it.

Do not go around with a chip on your shoulder as though some member of the institutional family was your natural enemy and you always had to be on guard and looking for trouble.

Do avoid gossip and set a worthy example in this respect to the nurses under your supervision.

Do try to remember always that patients are human individuals and see that the nurses respect their individuality.

Do be especially thoughtful over the new patient who is spending the first night in strange surroundings.

Do be loyal to the institution and repress any tendency to criticise the institution which is giving you your bread and butter, and which is giving pupils an education, putting up with their mistakes and failures and incompetence and endeavoring to send them forth into the world as trained skilled workmen.

FOR DISCUSSION

A pupil night nurse who was unusually neat and careful about her work after a heavy night's work went at once to bed as soon as possible. About ten o'clock she was awakened and called to dress and go back to the hospital to wash a teaspoon which she had overlooked and left unwashed on a bedside table beside a patient? Discuss this incident in relation to its effect on the nurse, its necessity in regard to general discipline and the general effect the repetition of such incidents would have on the morale of the school.

Show the importance of a night nurse being especially careful in making out her morning report.

To what extent should a night supervisor allow night nurses to finish up orders which were supposed to be attended to by day nurses but left over when the day nurses went off duty? What should her general attitude be regarding such matters?

Outline the duties in the order which you would expect a night nurse to attend to them in a ward or department having ten medical patients, four of whom are seriously ill, the others in different stages of convalescence.

At what hour in the morning would you instruct the nurses to begin their morning routine duties—temperature taking, bathing faces, etc.? What points would you caution them to be especially careful to observe in regard to this matter?

To what extent would you advise nurses to try to study while on

duty at night—considering that there were usually a few hours after midnight when their work was light?

If they were inclined to become sleepy after midnight what advice would you give them in regard to how to combat the desire to sleep?

What would you do if you found a nurse who habitually went to sleep on night duty if she got any opportunity?

What common misdemeanors or offences to which night nurses seem to be prone would you consider should be reported to the principal? How would you deal with such offences yourself?

PREFIXES AND SUFFIXES USED IN MEDICAL TERMS*

Prefixes

A-, an-, called *alpha privative* (Gr. α, αν, or αμ), the equivalent of our prefix, *un-*, or *in-*, denotes an absence or want of the thing or quality expressed by the principal; *e. g., adynamia, anaërobic, aphasia, apraxia, apyrexia, astigmatism, atony,* etc. *a* is used before consonants, *an* before vowels, and, rarely, *am* before *bl* or *br*. (To be distinguished from *ana.*)

Ad- (ad), to, at, toward, as, *adduction, adhesion.* The *d* is often changed in the compound to correspond to the next letter, as *accretion, appendix.*

Al-(Arab.) article *the; e. g., alchemy,* the secret art; *alcohol,* the very subtle.

Amphi- (or amph-) (ἀμφί), upon both sides, in two ways, as in *amphiarthrosis, amphibia,* etc.

Ana- (ἀνά). Up, through, again; *e. g., anabolism, anosarca, anatomy,* etc.

Anti- (or ant-) (ἀντί). Against, opposed to, opposite of; as *antaphrodisiac, antibrachium, antipyretic, antiseptic,* etc.

Apo- (ἀπό). Off, away, upon; *e. g., aponeurosis, apoplexy,* etc.

Auto- (αὐτός). Self; as *autopepsia, autopsy.*

Bary- (βαρύς). Heavy, difficult; as *barymezia, baryphonia,* etc.

Bi-, bin- (bis). Twice, twofold; *e. g., bicuspid, bivalent, binocular, binaural.*

Bio- (βίος). Life, *e. g., bioplasm, biology, biolysis.*

Brach- (βραχίων). Arm, pertaining to the arm; as *brachialgia, brachioncus.*

Broncho- (βρόγχος). Pertaining to the trachea; as *bronchorrhagia, bronchotomy.*

Cardi-, cardio- (καρδία). Pertaining to the heart, as *cardiogram, cardialgia.*

Celio-, cœlio- (κοιλία). Pertaining to the belly, as *celiotomy, cœliac.*

Chiro- (χείρ). The hand. *Chiragra, chiropodist.*

Co-, con-. Together, along with; *e. g., coitus, congenital.*

Dacryo- (δάκρυον). A tear, pertaining to a tear; as *dacryoid, dacryo-cystitis.*

Dactyl- (δάκτυλος). A finger; pertaining to the fingers; as *datcylitis, dactylion, dactylate.*

Dermo-, dermato- (δέρμα). The skin; pertaining to the skin; *e. g., dermotomy, dermatolysis.*

Di- (δίς). Twice, double; as *dimorphism, digastric.*

Dia- (διά). Through. Examples: *diabetes, diagnosis, diaphragm, diarrhea,* etc.

Dyn- (δύναμις). Force, power; *dynamogeny, dynamograph.*

Dys- (δυς). Difficult, defective, painful; *e. g., dysentery, dyspnea, dysuria.*

Ec-, ex-, ecto- (ἐκ, ἐξ, ἐκτός). Out, outside, away from; as in *ecchymoses, ecdemic, eclampsia, exostosis, exanthema, ectropion, ectoderm.*

En-, em- (ἐν, ἐμ). In, within; as in *embryo, embolism, endemic,* etc.

Endo-, ento- (ἐντός). Within, internal; *e. g., endarteritis, endoscope, entoblast, entoptic.*

Entero- (ἔντερον). The intestine; as in *enterocele, enterostomy,* etc.

Epi- (ἐπί). Upon, over, above; *e. g., epiblast, epicranium, epistaxis, epidemic,* etc.

Extra- (*Lat.*). Outside; *e. g., extravasation, extroversion.*

Galact- (γάλα). Milk; as *galactocele, galactozemia, galacturia.*

Gastro- (γαστήρ). The stomach; relation to the stomach; *e. g., gastrocele, gastrocnemius, gastroenterostomy,* etc.

Genio- (γενείον). Pertaining to the chin; *e. g., geniohyoglossus, geniohyoid.*

Glosso- (γλῶσσα). Pertaining to the tongue. See *glossology, glossoplegia, glossophytia.*

Hæma-, hæmato- or **hemo-** (αἷμα). The blood; pertaining to the blood. See *hematemesis, hematoma, hemorrhage,* etc.

Hemi- (ἡμι-ἡμισυς). Half; as in *hemiachromatopsia, hemicrania, hemiplegia.*

Hepat- (ἧπαρ). The liver; pertaining to the liver. See *hepatemphraxis, hepatization, hepatopostema.*

Hetera- (ἕτερος). Different; opposite; *e. g., heteroinfection, heterologous, heteropathy.*

Hydro-hydr- (ὕδωρ). Water; resembling or relating to water, dropsy, etc.; as in *hydremia, hydragogue, hydrate, hydrocephalus,* etc.

Hyper- (ὑπέρ). Excess; exaggerated abnormality in amount, size, quality, etc. See *hyperesthesia, hypermetropia, hyperpyrexia, hypertrophy,* and others.

Hypno- (ὕπνος). Sleep. See *hypnopathy, hypnotism.*

Hypo- (ὑπό). Diminution as to degree, amount, size, quality, etc., or that located under or beneath; *e. g., hyposthenia, hypoblast, hypochondriac, hypodermatic, hypoglossal.*

Hystera-, hystero- (ὑστέρα). The uterus or womb; relation to the uterus; *e. g., hysterectomy, hystero-epilepsy, hysteropexia,* etc.

Ileo- (*Ileum*). Pertaining to the ileum; *e. g., ileo-colitis, ileo-typhus.*

*Reprinted from "Gould's Illustrated Medical Dictionary."

Ilio- (*Ilium*). Pertaining to the ilium; *e. g., ilio femoral, ilio-lumbar.*
Im-, in- (*In*). Privative, negative; as *imperforate, incarceration, insane, incontinence.*
In- (ἐν). In, within, upon, by; as *incubation, infarction, inflammation, inoculation,* etc.
Infra- (*Infra*). Beneath, below; *e. g., inframaxillary, infrascapular.*
Inter- (*Inter*). Between. See *intercellular, intercostal, intertrigo,* and others.
Intra- (*Intra*). Within, inside of, as *intra-articular, intra-uterine.*
Iso-(ἴσος). Equal, like; *e. g., isometric, isothermal, isopathy.*
Kata-, kath- (κατά). Down, through; as *katabolism, katatonia, kathode.*
Leuko- (λευκός). Whiteness; *e. g., leukemia, leukocyte, leukomain, leukorrhea.*
Lith-, litho- (λίθος). Pertaining to stone, calculus, or lithic acid. See *lithemia, lithiasis lithotripsy,* etc.
Macro- (μακρός). Largeness, hypertrophy; as in *macroglossia, macromelia.*
Mal- (*Malus*). Bad; as *malformation, malpractice, malaria.*
Melano- (μέλας). Blackness, pigmentation; *e. g., melancholia, melano-sarcoma.*
Meso- (μέσος). The middle; *e. g., mesoblast, mesocolon,* etc.
Meta- (μετά). With, after; *e. g., metabolism, metotarsus.*
Micro- (μικρός). Smallness; *e. g., micrococcus, microglossia, microscope.*
Mon-, mono- (μόνος). Singleness. For example, *monamin, monomania, monorchis.*
Morpho- (μορφή). Shape, form; *e. g., morphography, morphology, morphometry.*
Multi- (*multus*). Number, many; *e. g., multilocular, multiparous.*
Myelo- (μυελός). Referring to the brain or spinal cord; as *myeloid, myelitis.*
Myo- (μῦς). Pertaining to a muscle or to muscularity. See *myocarditis, myoma, myopathy.*
Neo- (νέος). New, recent, young; as *neogala, neo-membrane, neoplasm.*
Nephr- (νεφρος). Pertaining to the kidney; *e. g., nephra-postasis, nephria, nephritis.*
Neuro- (νεῦρον). Relating to a nerve or to neurology. In the original Greek the word meant a cord or tendon—*neurosis,* the stringing of the bow. It is now applied only to nerve-structure; as, *e. g., neuralgia, neurasthenia, neurilemma, neuroglia.*
Ob- (*Ob*). In front of, against, denoting hindrance of obstruction; *e. g., obstruent, obturator, occlusion, opponens.*
Odonto- (ὀδούς). Of the teeth; as *odontology, odontalgia.*
Oligo- (ὀλίγος). Fewness or lack of, as *oligocythemia.*
Ophthalmo- (ὀφθαλμός). Pertaining to the eye, as *ophthalmia, ophthalmoplegia.*
Ortho- (ορθός). Straight, upright, correct. See *orthoscope, orthopedia, orthopraxis.*
Osteo- (ὀστεον). Referring to bone. See *osteoblast, osteomyelitis, osteoplastic.*
Oto- (οὖς). Pertaining to the ear, as *otorrhea, otophone.*
Oxy- (ὀξυς). Denoting the presence of oxygen, or acidity; as *oxygen, oxyhemoglobin.*
Pan-, Pant- (πᾶς, πᾶν). All, every, universal; as *pancreas, pangenesis, pantomorphic.*
Para- (παρά). Through, near, by, by the side of, abnormality. Examples: *paracentesis, paresthesia, parenchyma, parotid.*
Peri- (περί). About, around. See, *e. g., pericardium, perimeter, perilymph, periosteum.*
Pod- (πούς). Pertaining to the foot, as *podalgia, podedema.*
Poly-, pol- (πολυς). Many, much; *e. g., polycoria, polygatactia, polyuria.*
Præ-, pre- (*Præ*). Before; *e. g., præcordia, prepuce.*
Pro- (πρό). Before, down; as in *process, procidentia, prolapse, proptosis.*
Proc-, procto- (πρωκτός). The anus, pertaining to the anus; *e. g., proctitis, proctitis, proctoplegia.*
Pseudo- (ψευδής). False, spurious; as in *pseudarthrosis, pseudocyesis.*
Pyo- (πῦον). Pertaining to pus or purulency; *e. g., pyogenic, pyosalpinx.*
Pyr-, pyro- (πῦρ). Concerning fire or heat, or inflammation; *e. g., pyrogenous, pyrexia.*
Retro- (*Retro*). Backward, behind; *e. g., retroflex, retroversion.*
Rhin-, Rhino- (ῥίς). Pertaining to the nose, as *rhinoplasty, rhinitis.*
Semi- (*Semis*). Half, partly, almost, as *semicapium, semilunar.*
Sphyg-(σφυγμός). Pertaining to the pulse, as *sphygmometer, sphygmotechny.*
Sub- (*Sub*). Beneath, under; and also partialty or deficiency of, as *subclavian, subluxation.*
Super-(*Super*). Above, upon; excess of; *e. g., supercilium, superfecundation.*
Supra- (*Supra*). Above, upon, superior to as *supraorbital, supraspinatus.*
Sym-, syn- (σύν). With, together, same. See. *e. g., symblepharon, symphysis, synalgia, synchondrosis.*
Zoö- (ζῶον). Animal. See *zoölogy, Zoöchemia.*

Suffixes

-ago (*agere*). Gives the idea of activity, presentation, etc.; as *lumbago*.

-agogue (*ἀγειν*, to bear off, carry away). Signifies an agent stimulating the function of excretion or secretion of the product. Thus, *emmenagogue*, *hydragogue*, *sialagogue*.

-agra (*ἄγρα*, an attack, seizure). Denotes an acute attack of pain in the part, as *arthragyra*, *podagra*.

-algia (*ἄλγος*, pain). Pain in a part, expressed by the chief word; *e. g.*, *cephalalgia*, *gastralgia*.

-atresia (*ἀτρησια*). Imperforate, as in *proctatresia*.

-cele (*κήλη*). A tumor, hernia, or protrusion. See *cystocele*, *hydrocele*, *meningocele*.

-cele, cœle (*κοιλία*). A cavity, ventricle; *e. g.*, *mesocele*.

-ectomy (*ἐκτέμνειν*). Excision, exsection; as in oöphorectomy, *nephrectomy*, *splenectomy*.

-emia, (*αἷμα*, blood). Denotes a condition of the blood, or an ingredient in the same, expressed by preceding word; *e. g.*, *hydremia*, *lithemia*, *pyemia*, *uremia*.

-etin (*ῥητίνη*). Used in the names of certain resins, as *abietin*.

-fuge (fugare, to expel). Driving out, an expeller, as *vermifuge*, *febrifuge*, etc.

-graph, graphy (*γράφειν*, to write). An instrument; a treatise or description; *e. g.*, *sphygmograph*, *demography*.

-ia, often contracted to *-y*, denotes the quality of the root-word as an abstract noun, as *akromegalia*, *akromegaly*.

-idæ (*-ίδης*). The suffix to the name of a genus forming the name of a family; *bovidæ*, *equidæ*.

-igo. A variation of *-ago*; *e. g.*, *prurigo*, *vertigo*.

-is, -sis. Present the abstract idea of activity of the root-word.

-ism (*-ισμος*). Implies the doctrine, practice, or theory of the principal word; *Darwinism*, *tribadism*.

-ite (*-ίτης*). Of the nature of. In anatomy, denoting a constituent part of an organ; as *sergite*, *sternite*. In chemistry, any salt of an -ous acid; as *sulphite*, *phosphite*.

-itis (*-ίτις*). Originally the feminine ending of Greek substantives and denotes an especial activity of the root-word. By habit and general use it is now limited to inflammatory activity; as *gastritis*, *otitis*, etc.

-logy (*λόγος*, discourse). A treatise upon; as *bacteriology*, *dermatology*, *pathology*.

-lysis *λύσις*, a loosening). A separation into constituent parts, or the setting free of some part; as *hydrolysis*, *analysis*.

-malacia (*μάλακος*, soft). Abnormal softness; as in *osteomalacia*.

-mania (*μανία*, madness). The chief word denotes the principal symptom of the mental affection; *e. g.*, *erotomania*, *kleptomania*, etc.

-meter (*μέτρον*, a measure). An instrument for measuring; *e. g.*, *acrometer*, *urinometer*.

-odynia (*ὀδύνη*, excessive pain). The principal word denotes the seat of great pain, as *coccygodynia*.

-oid (*εἶδος*, form). Similar in shape, etc.; as in *choroid*, *cuboid*, *sphenoid*, *xiphoid*.

-oma (*ωμα*). A tumor, *e. g.*, *glioma*, *sarcoma*.

-opia (*ὤψ*). Pertaining to the eye or vision; as in *amblyopia*, *myopia*, etc.

-orium, -torium, -sorium (*τήρσον*). Designate places, tools, etc.; as *tentorium*, *auditorium*, etc.

-osis, -osus, derived from Greek words in *-ω*, and usually denote fulness, redundancy, excess.

-pathy (*πάθος*). A condition of disease, and also a method of cure; as *adenopathy*, *psychopathy*, *homeopathy*, *hydropathy*.

-phobia (*φοβος*, fear). Morbid or exaggerated fear or dread, as *agoraphobia*, *photophobia*.

-plasty (*πλάσσειν*, to form). Surgical plastic operation upon a part; *e. g.*, *blepharoplasty*, *rhinoplasty*.

-rhagia (*ῥήγνυμι*, to burst forth). A hemorrhage or excessive discharge; *e. g.*, *blennorrhagia*, *metrorrhagia*.

-rhaphy (*ῥαφή*, a suture). A stitching or suturing of a part; as *enterorrhaphy*, *perineorrhaphy*.

-rhea (*ῥέειν* to flow). An excessive discharge or excretion; as *blennorrhea*, *diarrhea*, *leukorrhea*.

-scope (*σκαπεῖν*, to look). An instrument for making an examination; as *laryngoscope*, *microscope*.

-scopy (*σκοπέειν*). An examination; as *ophthalmoscopy*.

-stomy (*στόμα*, mouth). A suffix seen in the names of those surgical operations in which an artificial opening or passage is formed, as *enterostomy*.

-tas, -ty. Derived originally from the Greek *-τηs*, denote abstract quality or idea, as *immunity, acidity.*

-tio, atio, -tion. A suffix of verbal roots denoting an action or function as taking place—an occurrence. The *n* was added to the original *-tio* by Roman and French influence.

-tomy (*τέμνειν*, to cut). Incision; *e. g., laparotomy, tenotomy.*

-ulus, -ula, -ion, -ulum, -ola, -ellus, -illus, -leus. Diminutives.

-uria (*ουρεειν*, to urinate). Abnormalities of the urine or of urination; as *albuminuria, polyuria.*

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Applied Bacteriology for Nurses. By CHARLES F. BOLDUAN, M.D., Director Bureau of Public Health Education, and MARIE GRUND, M. D, Bacteriologist, Department of Health, City of New York 188 pages, illustrated. Cloth, $1.50 net. **Published November, 1916**

Harding's Higher Aspect of Nursing

This book represents the deductions from the author's many years of personal study and experience both in the training-school and in the field of practical nursing in the hospitals and in private.

Higher Aspect of Nursing. 12mo of 300 pages. By GERTRUDE HARDING. **Published February, 1919**

Beck's Reference Handbook THIRD EDITION

This book contains all the information that a nurse requires to carry out any directions given by the physician. The *Montreal Medical Journal* says it is "cleverly systematized and shows close observation of the sickroom and hospital regime."

A Reference Handbook for Nurses. By AMANDA K. BECK, Graduate of the Illinois Training School for Nurses, Chicago, Ill. 16mo of 229 pages. Bound in flexible leather, $1.50 net. **February, 1913**

Roberts' Bacteriology & Pathology NEW (2d) EDITION

This new work is practical in the strictest sense. Written specially for nurses, it confines itself to information that the nurse should know. All unessential matter is excluded. The style is concise and to the point, yet clear and plain. The text is illustrated throughout.

Bacteriology and Pathology for Nurses. By JAY G. ROBERTS, Ph. G., M. D., Oskaloosa, Iowa. 206 pages, illus. $1.50 net. **August, 1916**

DeLee's Obstetrics for Nurses

NEW (5th) EDITION

Dr. DeLee's book really considers two subjects—obstetrics for nurses and actual obstetric nursing. *Trained Nurse and Hospital Review* says the "book abounds with practical suggestions, and they are given with such clearness that they cannot fail to leave their impress."

Obstetrics for Nurses. By JOSEPH B. DELEE, M. D., Professor of Obstetrics at the Northwestern University Medical School, Chicago. 12mo volume of 550 pages, illustrated. Cloth, $2.75 net. **July, 1917**

Davis' Obstetric & Gynecologic Nursing

JUST OUT—NEW (5th) EDITION

The Trained Nurse and Hospital Review says: "This is one of the most practical and useful books ever presented to the nursing profession." The text is illustrated.

Obstetric and Gynecologic Nursing. By EDWARD P. DAVIS, M. D., Professor of Obstetrics in the Jefferson Medical College, Philadelphia. 498 pages, illustrated. Cloth, $2.00 net. **Published June, 1917**

Macfarlane's Gynecology for Nurses

THIRD EDITION

Dr. A. M. Seabrook, Woman's Hospital of Philadelphia, says: "It is a most admirable little book, covering in a concise but attractive way the subject from the nurse's standpoint."

A Reference Handbook of Gynecology for Nurses. By CATHARINE MACFARLANE, M. D., Gynecologist to the Woman's Hospital of Philadelphia. 16mo of 175 pages, with 70 illustrations. Flexible leather, $1.50 net. **Published October, 1918**

Asher's Chemistry and Toxicology

SECOND EDITION

Dr. Asher's one aim was to emphasize throughout his book the *application* of chemical and toxicologic knowledge in the study and practice of nursing. He has admirably succeeded.

12mo of 209 pages. By PHILIP ASHER, PH.G., M.D., Dean and Professor of Chemistry, New Orleans College of Pharmacy. Cloth, $1.50 net. **Published October, 1918**

Aikens' Home Nurse's Handbook NEW (2d) EDITION

The point about this work is this: It tells you, and *shows* you just how to do those little things entirely omitted from other nursing books, or at best only incidentally treated. The chapters on "Home Treatments" and "Every-Day Care of the Baby," stand out as particularly practical.

Home Nurse's Handbook. By CHARLOTTE A. AIKENS, formerly Director of the Sibley Memorial Hospital, Washington, D. C. 12mo of 303 pages, illustrated. Cloth, $1.50 net. **Published March, 1917**

Eye, Ear, Nose, and Throat Nursing

This book is written from beginning to end *for the nurse.* You get antiseptics, sterilization, nurse's duties, etc. You get anatomy and physiology, common remedies, how to invert the lids, administer drops, solutions, salves, anesthetics, the various diseases and their management. *New (2d) Edition.*

Nursing in Diseases of the Eye, Ear, Nose and Throat. By the Committee on Nurses of the Manhattan Eye, Ear and Throat Hospital. 12mo of 291 pages, illustrated. Cloth, $1.50 net. **Published Sept. 1915**

Paul's Materia Medica NEW (3d) EDITION

In this work you get definitions—what an alkaloid is, an infusion, a mixture, an ointment, a solution, a tincture, etc. Then a classification of drugs according to their physiologic action, when to administer drugs, how to administer them, and how much to give.

A Text-Book of Materia Medica for Nurses. By GEORGE P. PAUL, M.D. 12mo of 295 pages. Cloth, $1.50 net. **Published August, 1917**

Paul's Fever Nursing NEW (3d) EDITION

In the first part you get chapters on fever in general, hygiene, diet, methods for *reducing the fever*, complications. In the second part each infection is taken up *in detail.* In the third part you get antitoxins and vaccines, bacteria, warnings of the full dose of drugs, poison antidotes, enemata, etc.

Nursing in the Acute Infectious Fevers. By GEORGE P. PAUL, M. D. 12mo of 275 pages, illustrated. Cloth, $1.00 net. **October, 1915**

McCombs' Diseases of Children for Nurses

NEW (3d) EDITION

Dr. McCombs' experience in lecturing to nurses has enabled him to emphasize *just those points that nurses most need to know. National Hospital Record* says: "We have needed a good book on children's diseases and this volume admirably fills the want." The nurse's side has been written by head nurses, very valuable being the work of Miss Jennie Manly.

Diseases of Children for Nurses. By ROBERT S. MCCOMBS, M. D., Instructor of Nurses at the Children's Hospital of Philadelphia. 12mo of 509 pages, illustrated. Cloth, $2.25 net. **Published June, 1916**

Wilson's Obstetric Nursing NEW (3d) EDITION

In Dr. Wilson's work the entire subject is covered from the beginning of pregnancy, its course, signs, labor, its actual accomplishment, the puerperium and care of the infant. *American Journal of Obstetrics* says: "Every page empasizes the nurse's relation to the case."

A Reference Handbook of Obstetric Nursing. By W. REYNOLDS WILSON, M. D., Visiting Physician to the Philadelphia Lying-in Charity. 258 pages, illus. Flexible leather, $1.50 net. **April, 1916**

American Pocket Dictionary NEW (10th) EDITION

The *Trained Nurse and Hospital Review* says: "We have had many occasions to refer to this dictionary, and in every instance we have found the desired information."

American Pocket Medical Dictionary. Edited by W. A. NEWMAN DORLAND, A. M., M. D. Flexible leather, gold edges, $1.25 net; indexed, $1.50 net. **Published September, 1917**

Lewis' Anatomy and Physiology THIRD EDITION

Nurses Journal of Pacific Coast says "it is not in any sense rudimentary, but comprehensive in its treatment of the subjects." The low price makes this book particularly attractive.

Anatomy and Physiology for Nurses. By LEROY LEWIS, M.D. 12mo of 326 pages; 150 illustrations. Cloth, $1.75 net.
Published September, 1913

Goodnow's War Nursing

Written at the front and on the battlefield, this book shows the inexperienced nurse how to care for a ward of wounded men from arrival to dismissal; it introduces you to *actual conditions*, and shows you how they are best met.

War Nursing: a Text-Book for Auxiliary Nurses. By MINNIE GOODNOW, R. N., War Nurse in France. 172 pages, illustrated. Cloth, $1.50 net. **Published December, 1917**

Warnshuis' Surgical Nursing

The author gives you here the essential principles of surgical nursing, and reliable fundamental knowledge based on his own personal conclusions and experiences. Secondary matter is excluded, and all primary and pertinent points are set down briefly and concisely.

Octavo of 277 pages, with 255 illustrations. By FREDERICK C. WARNSHUIS, M.D., F.A.C.S., Visiting Surgeon, Butterworth Hospital, Grand Rapids, Michigan. Cloth, $2.50 net.

Published March, 1918

Friedenwald and Ruhrah's Dietetics for Nurses

NEW (4th) EDITION

This work has been prepared to meet the needs of the nurse, both in training school and after graduation. *American Journal of Nursing* says it "is exactly the book for which nurses and others have long and vainly sought."

Dietetics for Nurses. By JULIUS FRIEDENWALD, M. D., and JOHN RUHRAH, M.D., University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore. 12mo volume of 467 pages. Cloth, $1.50 net. **Published July, 1917**

Friedenwald & Ruhrah on Diet

FIFTH EDITION

This work is a fuller treatment of the subject of diet, presented along the same lines as the smaller work. Everything concerning diets, their preparation and use, coloric values, rectal feeding, etc., is here given in the light of the most recent researches. **Published March, 1919**

Diet in Health and Disease. By JULIUS FRIEDENWALD, M.D., and JOHN RUHRAH, M.D. Octavo volume of 919 pages.

Catlin's Hospital Social Service

Miss Catlin's book is especially planned to help those who are establishing social service centres in new fields, as well as those in dispensaries already firmly established. She has had the practical experience of many years to draw upon.

NELIA CATLIN, R. N., Director of Social Service Work, Youngstown Hospital, Ohio. 12mo of 113 pages, with 43 illustrations. Cloth, $1.25 net. **Published May, 1918**

Galbraith's Personal Hygiene and Physical Training for Women

NEW (2d) EDITION

Dr. Galbraith's book tells you how to train the physical powers to their highest degree of efficiency by means of fresh air, tonic baths, proper food and clothing, gymnastic and outdoor exercise. There are chapters on the skin, hair, development of the form, carriage, dancing, walking, running, swimming, rowing, and other outdoor sports.

Personal Hygiene and Physical Training for Women. By ANNA M. GALBRAITH, M.D., Fellow New York Academy of Medicine. 12mo of 393 pages, illustrated. Cloth, $2.25 net. **Published January, 1917**

Galbraith's Four Epochs of Woman's Life

This book covers each epoch fully, in a clean, instructive way, taking up puberty, menstruation, marriage, sexual instinct, sterility, pregnancy, confinement, nursing, the menopause.

The Four Epochs of Women's Life. By ANNA M. GALBRAITH, M.D., with an Introductory Note by JOHN H. MUSSER, M. D. 12mo of 296 pages. Cloth, $1.50 net. **Third Edition published March, 1917**

Griffith's Care of the Baby

NEW (6th) EDITION

Here is a book that tells in simple, straightforward language exactly how to care for the baby in health and disease; how to keep it well and strong; and should it fall sick, how to carry out the physician's instructions and nurse it back to health again. **Published June, 1915**

The Care of the Baby. By J. P. CROZER GRIFFITH, M.D., University of Pennsylvania. 12mo of 458 pages, illustrated. Cloth, $1.50 net

Aikens' Ethics for Nurses

FIVE PRINTINGS

This book emphasizes the importance of ethical training. It is a most excellent text-book, particularly well adapted for classroom work. The illustrations and practical problems used in the book are drawn from life.

Studies in Ethics for Nurses. By CHARLOTTE A. AIKENS, formerly Superintendent of Columbia Hospital, Pittsburg. 12mo of 320 pages. Cloth, $2.00 net. Published April, 1916

Goodnow's History of Nursing

Miss Goodnow's work gives the main facts of nursing history from the beginning to the present time. It is suited for classroom work or postgraduate reading. Sufficient details and personalities have been added to give color and interest, and to present a picture of the times described.

History of Nursing. By MINNIE GOODNOW, R.N., formerly Superintendent of the Women's Hospital, Denver. 12mo of 370 pages, illustrated. Cloth, $2.00 net. Published December, 1916

Berry's Orthopedics for Nurses

The object of Dr. Berry's book is to supply the nurse with a work that discusses clearly and simply the diagnosis, prognosis and treatment of the more common and important orthopedic deformities. Many illustrations are included. The work is very practical.

Orthopedic Surgery for Nurses. By JOHN MCWILLIAMS BERRY, M.D., Clinical Professor of Orthopedics and Rontgenology, Albany Medical College. Cloth, $1.00 net. Published July, 1916

Whiting's Bandaging

This new work takes up each bandage in detail, telling you—and *showing* you by original illustrations—just how each bandage should be applied, each turn made. Dr. Whiting's teaching experience has enabled him to devise means for overcoming common errors in applying bandages.

Bandaging. By A. D. WHITING, M.D., Instructor in Surgery at the University of Pennsylvania. 12mo of 151 pages, with 117 illustrations. Cloth, $1.50 net. Published November, 1915

Smith's Operating-Room

The object is to show you how to assist the surgeon according to the newest operative technic. You get the result of active experience systematized, and in concise form. You get a thorough digest of every essential; detailed lists of instruments; glossary of medical terms. Every phase of the subject is covered by ample, practical instruction.

The Operating-Room. A Primer for Nurses. By AMY ARMOUR SMITH, R.N., formerly Superintendent of Nurses at the Woman's Hospital of the State of New York. 12mo of 295 pages, illustrated. Cloth, $1.50 net. **Published October, 1916**

Bandler's The Expectant Mother

This is an anatomy, physiology and hygiene covering those points and functions concerned in child-bearing and designed for the use of the nurse and the mother. Every question of interest to the expectant mother is treated.

The Expectant Mother. By S. WYLLIS BANDLER, M. D., Professor of Diseases of Women, New York Post-Graduate Medical School and Hospital. Cloth, $1.25 net. **Published October, 1916**

Winslow's Prevention of Disease

Here you get a practical guide, giving you briefly the means to avoid the various diseases described. The chapters on diet, exercise, tea, coffee, alcohol, prevention of cancer, etc., are of special interest. There are, besides, chapters on the prevention of malaria, colds, constipation, obesity, nervous disorders and tuberculosis. It is a record of twenty-five years' active practice.

By KENELM WINSLOW, M.D., formerly Assistant Professor of Comperative Therapeutics, Harvard University. 12mo of 348 pages, illustrated. Cloth, $1.75 net. **Published November, 1916**

Brady's Personal Health

This is different from other health books. It is written by a physician with some fifteen years' experience in writing for the laity. It covers the entire range of health questions—care of mouth and teeth, catching cold, adenoids and tonsils, eye and ear, ventilation, skin, hair and nails, nutrition, nervous ailments, etc.

Personal Health. A Doctor Book for Discriminating People. By WILLIAM BRADY, M.D., Elmira, N.Y. 12mo of 400 pages. Cloth, $1.50 net. **Published September, 1916**

Hoxie's Medicine for Nurses

Medicine for Nurses and Housemothers. By GEORGE HOWARD HOXIE, M.D., University of Kansas. 12mo of 390 pages, illustrated. Cloth, $1.75 net.

Third Edition—February, 1918

Böhm & Painter's Massage

Massage. By MAX BOHM, M.D., Berlin, Germany. Edited by CHAS. F. PAINTER, M.D., Tufts College. Octavo of 91 pages, 97 illustrations. Cloth, $1.75 net. *June, 1913*

Boyd's State Registration for Nurses

State Registration for Nurses. By LOUIE CROFT BOYD, R. N., Graduate Colorado Training School for Nurses. Cloth, $1.25 net. *Second Edition—February, 1915*

Morrow's Immediate Care of Injured

Immediate Care of the Injured. By ALBERT S. MORROW, M.D., New York Polyclinic. Octavo of 354 pages, with 242 illustrations. Cloth, $2.75 net.

Third Edition—November, 1917

deNancrede's Anatomy

EIGHTH EDITION

Essentials of Anatomy. By CHARLES B. G. DENANCREDE, M. D., University of Michigan. 12mo of 400 pages, 180 illustrations. Cloth, $1.50 net. *Oct., 1911*

Montgomery's Care of Surgical Patients

Care of Patients Undergoing Gynecologic and Abdominal Procedures (BEFORE, DURING, AND AFTER OPERATION). By E. E. MONTGOMERY, A.M., M.D., LL.D., F.A.C.S., Professor of Gynecology in Jefferson Medical College, Philadelphia. 12mo of 149 pages, illustrated. Cloth, $1.25 net. *Published December, 1916*

Register's Fever Nursing

A Text-Book on Practical Fever Nursing. By EDWARD C. REGISTER, M.D., North Carolina Medical College. Octavo of 350 pages, illustrated. Cloth, $2.50 net. *June 1907*

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